



FCC Test Report

Equipment : AC4000 MU-MIMO Tri-Band Wi-Fi Router
Brand Name : tp-link
Model No. : Archer C4000
FCC ID : TE7C4000
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Function : ☒ Point-to-multipoint; ☐ Point-to-point
Applicant : TP-Link Technologies Co., Ltd.
Building 24 (floors 1,3,4,5) and 28 (floors1-4)
Central Science and Technology Park,Shennan Rd,
Nanshan, Shenzhen,China
Manufacturer : TP-Link Technologies Co., Ltd.
Building 24 (floors 1,3,4,5) and 28 (floors1-4)
Central Science and Technology Park,Shennan Rd,
Nanshan, Shenzhen,China

The product sample received on Sep. 12, 2017 and completely tested on Oct. 31, 2017. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

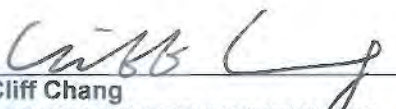

Cliff Chang
SPORTON INTERNATIONAL INC.





Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Testing Applied Standards	7
1.3	Testing Location Information.....	7
1.4	Measurement Uncertainty	7
2	TEST CONFIGURATION OF EUT	8
2.1	Test Channel Mode	8
2.2	The Worst Case Measurement Configuration.....	9
2.3	EUT Operation during Test	10
2.4	Accessories	10
2.5	Support Equipment.....	11
2.6	Test Setup Diagram	12
3	TRANSMITTER TEST RESULT	15
3.1	AC Power-line Conducted Emissions	15
3.2	DTS Bandwidth	17
3.3	Maximum Conducted Output Power	18
3.4	Power Spectral Density	20
3.5	Emissions in Non-restricted Frequency Bands	22
3.6	Emissions in Restricted Frequency Bands.....	23
4	TEST EQUIPMENT AND CALIBRATION DATA	27
APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS		
APPENDIX B. TEST RESULTS OF DTS BANDWIDTH		
APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER		
APPENDIX D. TEST RESULTS OF POWER SPECTRAL DENSITY		
APPENDIX E. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS		
APPENDIX F. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS		
APPENDIX G. TEST RESULTS OF RADIATED EMISSION CO-LOCATION		
APPENDIX H. TEST PHOTOS		
PHOTOGRAPHS OF EUT V01		

Summary of Test Result

Conformance Test Specifications				
Report Clause	Ref. Std. Clause	Description	Limit	Result
1.1.2	15.203	Antenna Requirement	FCC 15.203	Complied
3.1	15.207	AC Power-line Conducted Emissions	FCC 15.207	Complied
3.2	15.247(a)	DTS Bandwidth	≥500kHz	Complied
3.3	15.247(b)	Maximum Conducted Output Power	Power [dBm]:30	Complied
3.4	15.247(e)	Power Spectral Density	PSD [dBm/3kHz]:8	Complied
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	Non-Restricted Bands: > 30 dBc	Complied
3.6	15.247(d)	Emissions in Restricted Frequency Bands	Restricted Bands: FCC 15.209	Complied



SPORTON INTERNATIONAL INC.
TEL : 886-3-3273456
FAX : 886-3-3270973
FCC ID: TE7C4000

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	11b	20	3TX
2.4-2.4835GHz	11g	20	3TX
2.4-2.4835GHz	HT20	20	3TX
2.4-2.4835GHz	VHT20	20	3TX
2.4-2.4835GHz	HT40	40	3TX
2.4-2.4835GHz	VHT40	40	3TX

Note:

- ♦ 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.
- ♦ Nss-Min is the minimum number of spatial streams.
- ♦ Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Port	Brand	P/N	Antenna Type	Connector	Gain (dBi)		
						2.4GHz	5GHz (Band 1)	5GHz (Band 4)
1	1	TP-LINK	3101500737	Dipole	I-PEX	1.8	1.8	-
2	2	TP-LINK	3101500737	Dipole	I-PEX	1.8	1.8	-
3	3	TP-LINK	3101500737	Dipole	I-PEX	1.8	1.8	-
4	1	TP-LINK	3101500734	Dipole	I-PEX	-	-	1.8
5	2	TP-LINK	3101500734	Dipole	I-PEX	-	-	1.8
6	3	TP-LINK	3101500734	Dipole	I-PEX	-	-	1.8

Note: The EUT has six antennas.

<For 2.4GHz Band>
For IEEE 802.11b/g/n mode (3TX/3RX)

Port 1, Port 2 and Port 3 can be used as transmitting/receiving antenna.

Port 1, Port 2 and Port 3 could transmit/receive simultaneously.

<For 5GHz Band>
For IEEE 802.11a/n/ac mode (3TX/3RX)

Port 1, Port 2 and Port 3 can be used as transmitting/receiving antenna.

Port 1, Port 2 and Port 3 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
11b	0.998	0.009	n/a (DC>=0.98)	n/a (DC>=0.98)
11g	0.986	0.061	n/a (DC>=0.98)	n/a (DC>=0.98)
VHT20	0.98	0.088	n/a (DC>=0.98)	n/a (DC>=0.98)
VHT40	0.957	0.191	955u	3k

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for 802.11ac in 5GHz			
Test Software Version	accessMTool_0.0.0.1.exe			

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013
- ♦ FCC KDB 558074 D01 v04
- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 644545 D01 v01r02
- ♦ FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location				
☐	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.	TEL : 886-3-327-3456	FAX : 886-3-318-0055
☒	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.	TEL : 886-3-656-9065	FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Ron Huang	25.5°C / 57%	Sep. 22, 2017~ Oct. 17, 2017
Radiated	03CH01-CB	Welson Chen / Mason Chen	22°C / 54%	Oct. 19, 2017~ Oct. 31, 2017
AC Conduction	CO01-CB	GN Hou	24°C / 62%	Sep. 19, 2017

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74 x10 ⁻⁸	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
11b_Nss1,(1Mbps)_3TX	-
2412MHz	97
2417MHz	97
2437MHz	97
2457MHz	97
2462MHz	96
11g_Nss1,(6Mbps)_3TX	-
2412MHz	77
2417MHz	87
2437MHz	100
2457MHz	84
2462MHz	80
VHT20_Nss1,(MCS0)_3TX	-
2412MHz	75
2417MHz	80
2437MHz	100
2457MHz	81
2462MHz	75
VHT40_Nss1,(MCS0)_3TX	-
2422MHz	54
2427MHz	57
2437MHz	67
2447MHz	62
2452MHz	57

Note:

- ♦ VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for HT20 and HT40 are the same or lower than VHT20 and VHT40.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Normal Link
1	EUT with AC Adapter

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
1	Place EUT in Y axis with AC Adapter
2	Place EUT in Z axis with AC Adapter
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT can be placed in Y-axis and Z-axis. After evaluating, Y-axis was the worst case, Consequently, measurement will follow this same test mode.	
1	Place EUT in Y axis with 2.4GHz

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	Place EUT in Y axis with 2.4GHz + 5GHz Band 1/2 + 5GHz Band 3/4
2	Place EUT in Z axis with 2.4GHz + 5GHz Band 1/2 + 5GHz Band 3/4
For operating mode 2 is the worst case and it was record in this test report.	
Refer to Appendix G for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	Normal Link
1	WLAN 2.4GHz + 5GHz Band 1/2 + 5GHz Band 3/4
Refer to Sporton Test Report No.: FA791103 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories					
No.	Equipment Name	Brand Name	Model Name	Rating	DC Power Line
1	Adapter	Huntkey	HKA06012050-7G	Input: 100-240V~ 1.5A 50/60Hz Output: 12.0V, 5.0A	Non-shielded, 0.2m
Others					
Power Cable*1: Non-Shielded, 2.6m					

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*5	DELL	E6430	DoC
2	Flash disk	Transcend	604108 8255	DoC
3	Flash disk3.0	Transcend	JetFlash-700	DoC

For Test Site No: 03CH01-CB (below 1GHz)

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*2	DELL	E4300	DoC
2	NB*3	Apple	Mac Book	DoC
3	Flash disk	Silicon Power	B06	DoC
4	Flash disk3.0	Silicon Power	B06	DoC

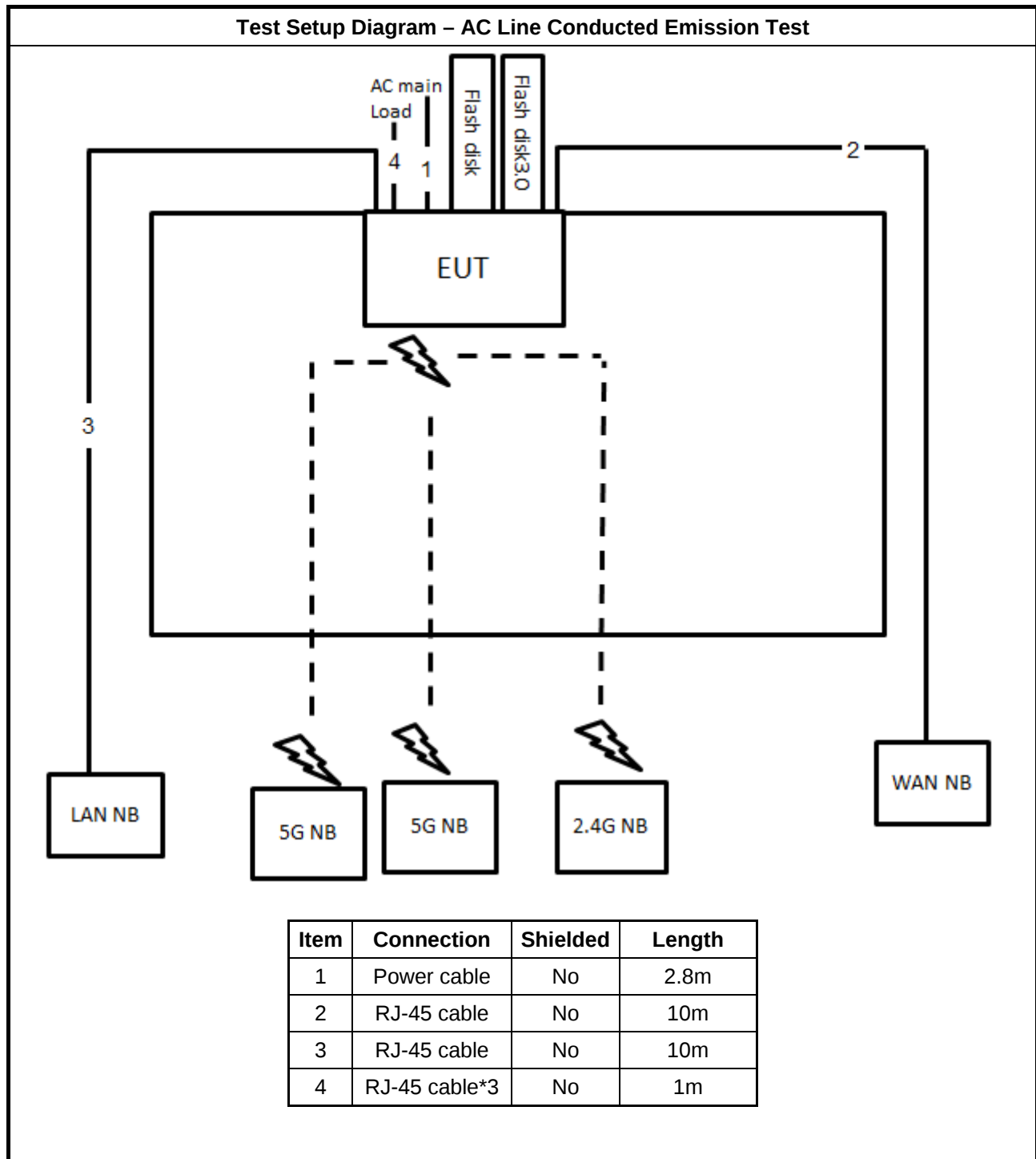
For Test Site No: 03CH01-CB (above 1GHz)

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	DoC

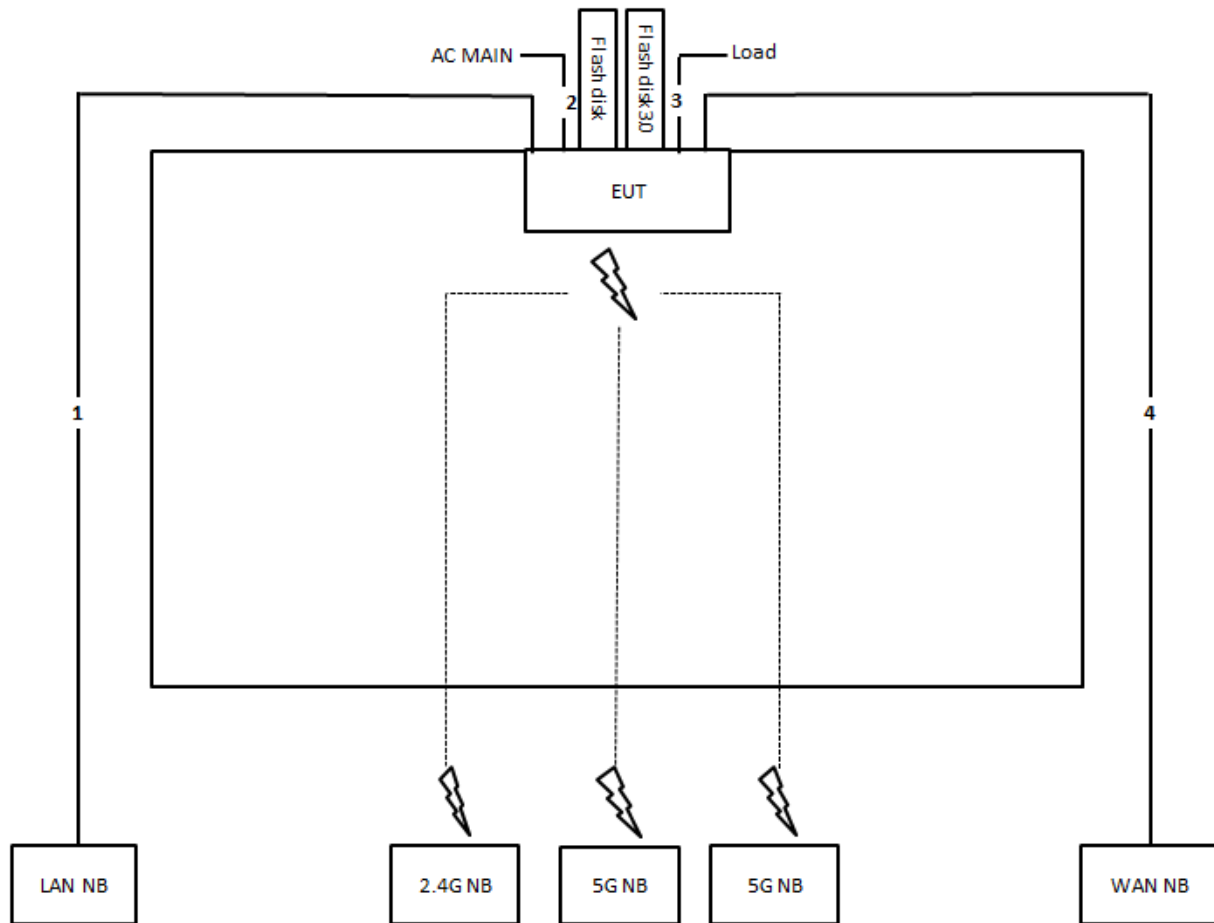
For Test Site No: TH01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	DoC

2.6 Test Setup Diagram

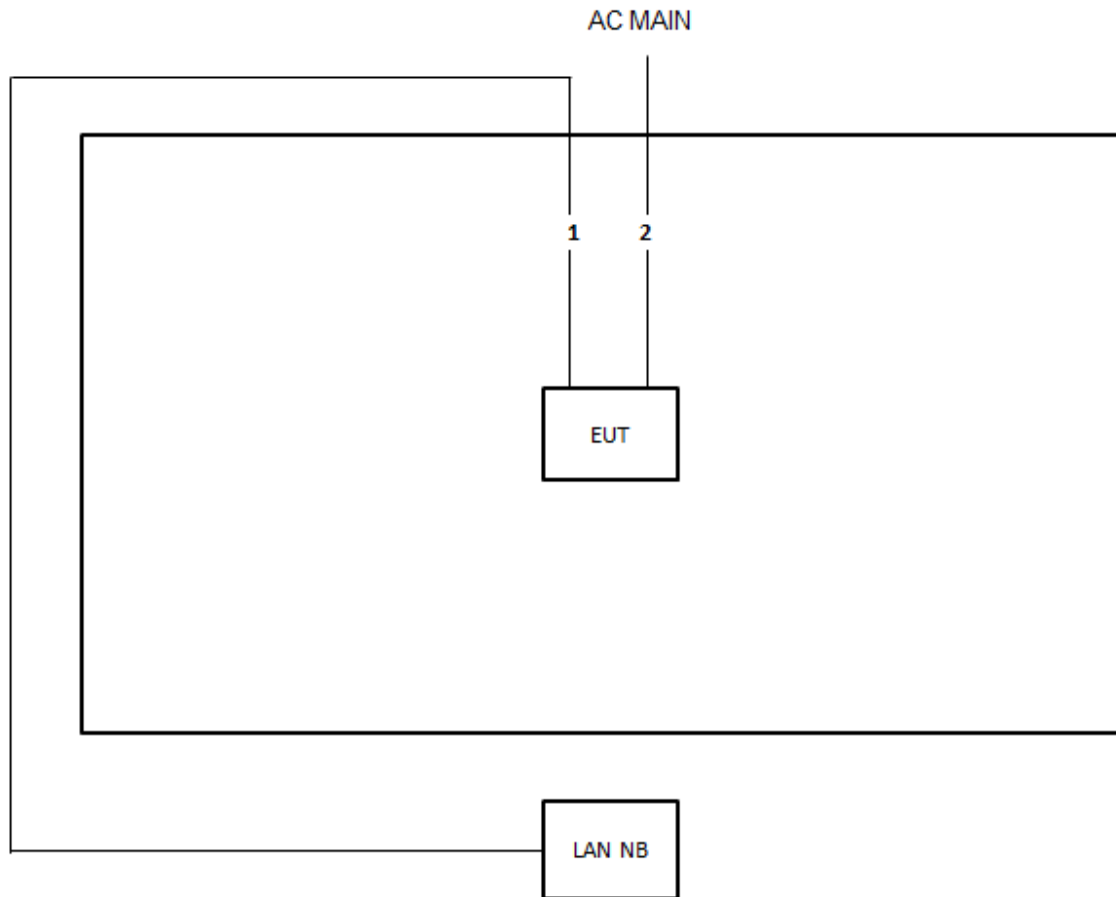


Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	2.8m
3	RJ-45 cable*3	No	1.5m
4	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	2.8m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

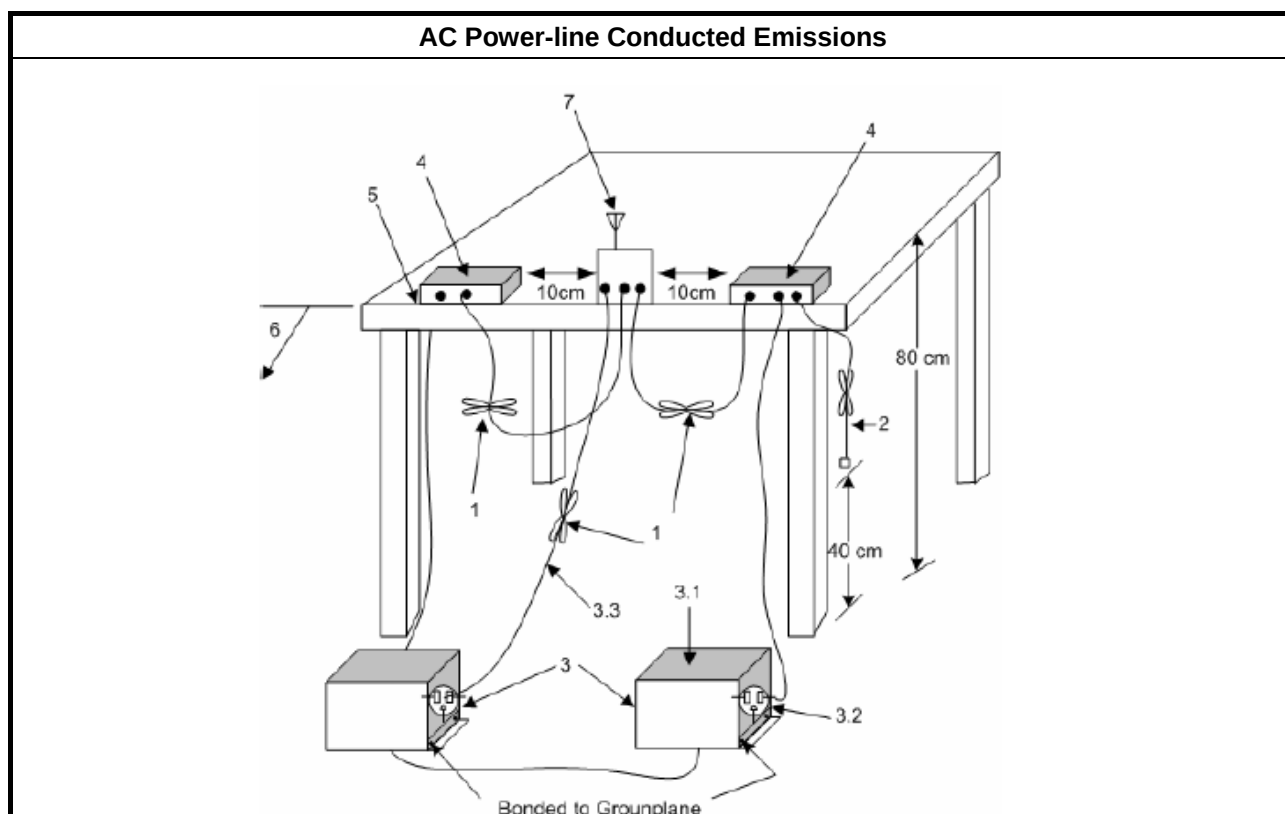
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup





3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit	
Systems using digital modulation techniques:	
▪	6 dB bandwidth $\geq$ 500 kHz.

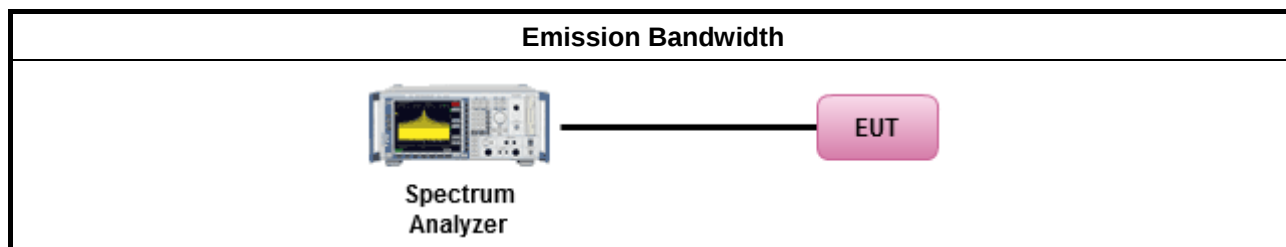
3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
☒	Refer as FCC KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
☐	Refer as FCC KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	▪ Smart antenna system (SAS):
	- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

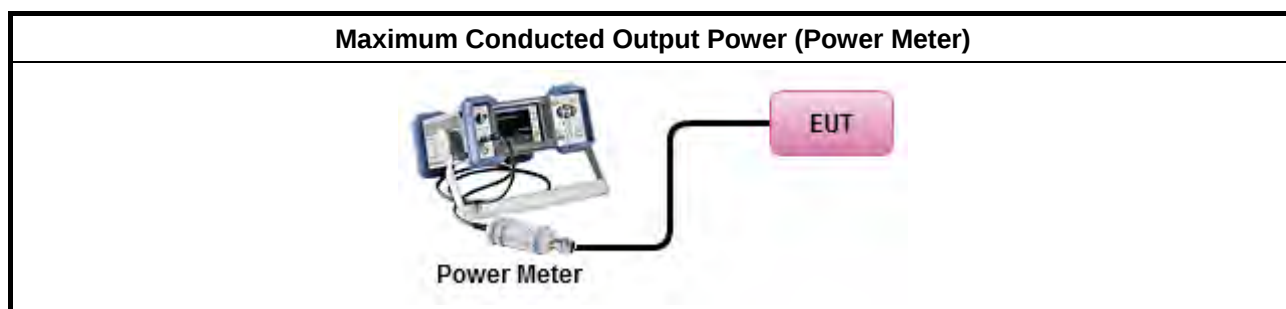
3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as FCC KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
☐	Refer as FCC KDB 558074, clause 9.1.2 Option 2 (peak power meter for VBW ≥ DTS BW)
Maximum Conducted Output Power	
[duty cycle ≥ 98% or external video / power trigger]	
☐	Refer as FCC KDB 558074, clause 9.2.2.2 Method AVGSA-1 (spectral trace averaging).
☐	Refer as FCC KDB 558074, clause 9.2.2.3 Method AVGSA-1 Alt. (slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
☐	Refer as FCC KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
☐	Refer as FCC KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
RF power meter and average over on/off periods with duty factor or gated trigger	
☒	Refer as FCC KDB 558074, clause 9.2.3 Method AVGPM-G (using an RF average power meter).
☐	Refer as FCC KDB 558074, clause 9.1.2 PKPM1 Peak power meter method.
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
Power Spectral Density (PSD) $\leq$ 8 dBm/3kHz

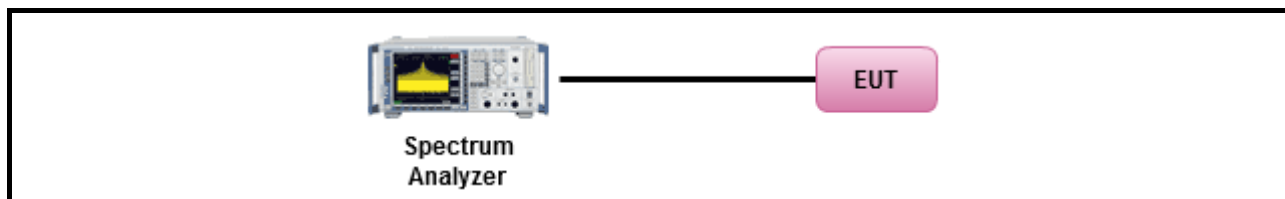
3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method
Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
☒ Refer as FCC KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak). [duty cycle $\geq$ 98% or external video / power trigger]
☐ Refer as FCC KDB 558074, clause 10.3 Method AVGPSD-1 (spectral trace averaging).
☐ Refer as FCC KDB 558074, clause 10.4 Method AVGPSD-2 (slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor
☐ Refer as FCC KDB 558074, clause 10.5 Method AVGPSD-1 Alt (spectral trace averaging).
☐ Refer as FCC KDB 558074, clause 10.6 Method AVGPSD-2 Alt. (slow sweep speed)
For conducted measurement.
If The EUT supports multiple transmit chains using options given below:
☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.	

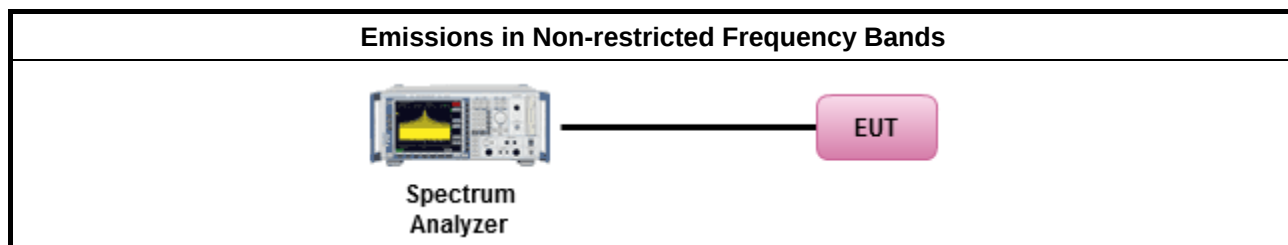
3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
Refer as FCC KDB 558074, clause 11 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

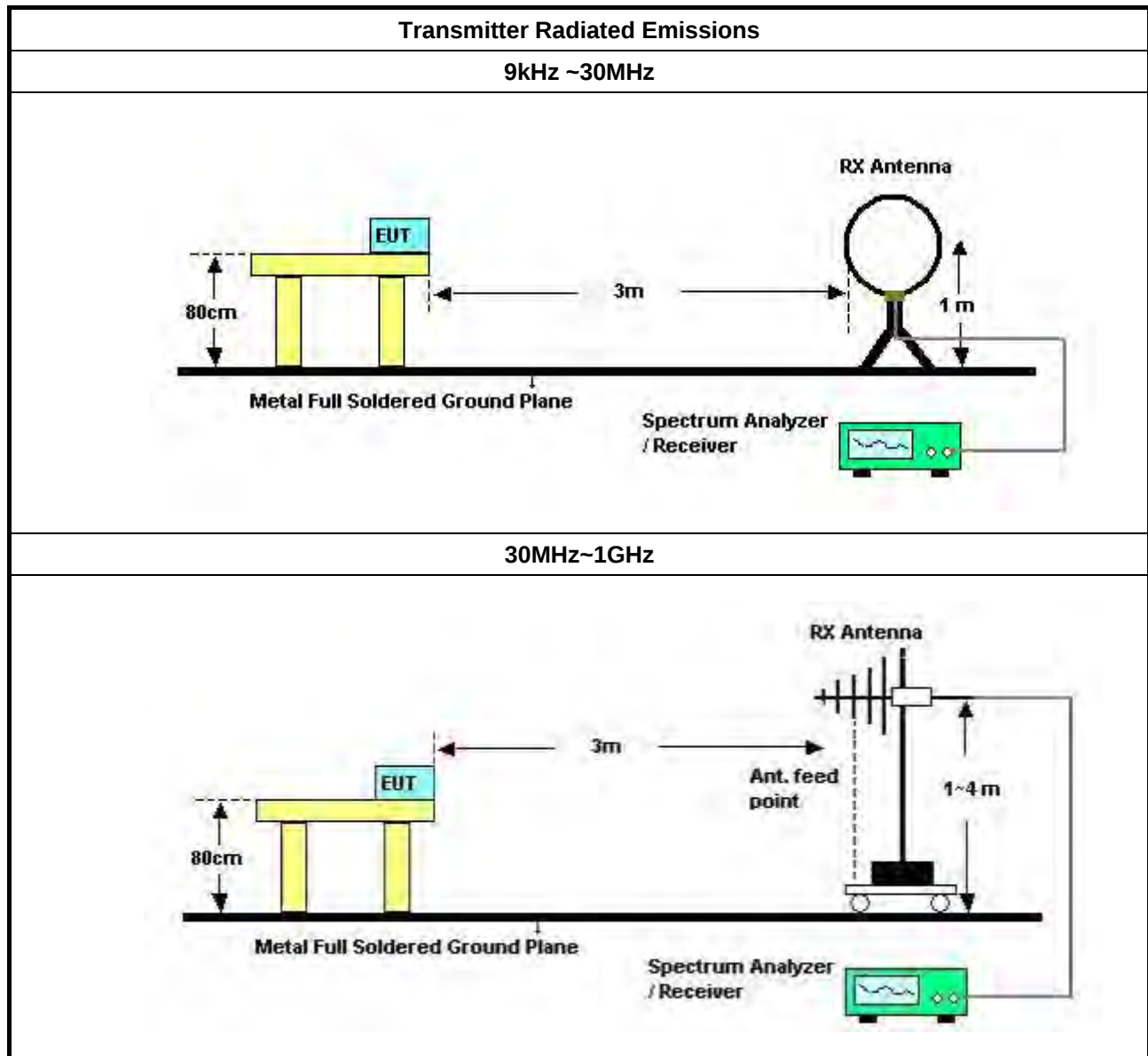
3.6.2 Measuring Instruments

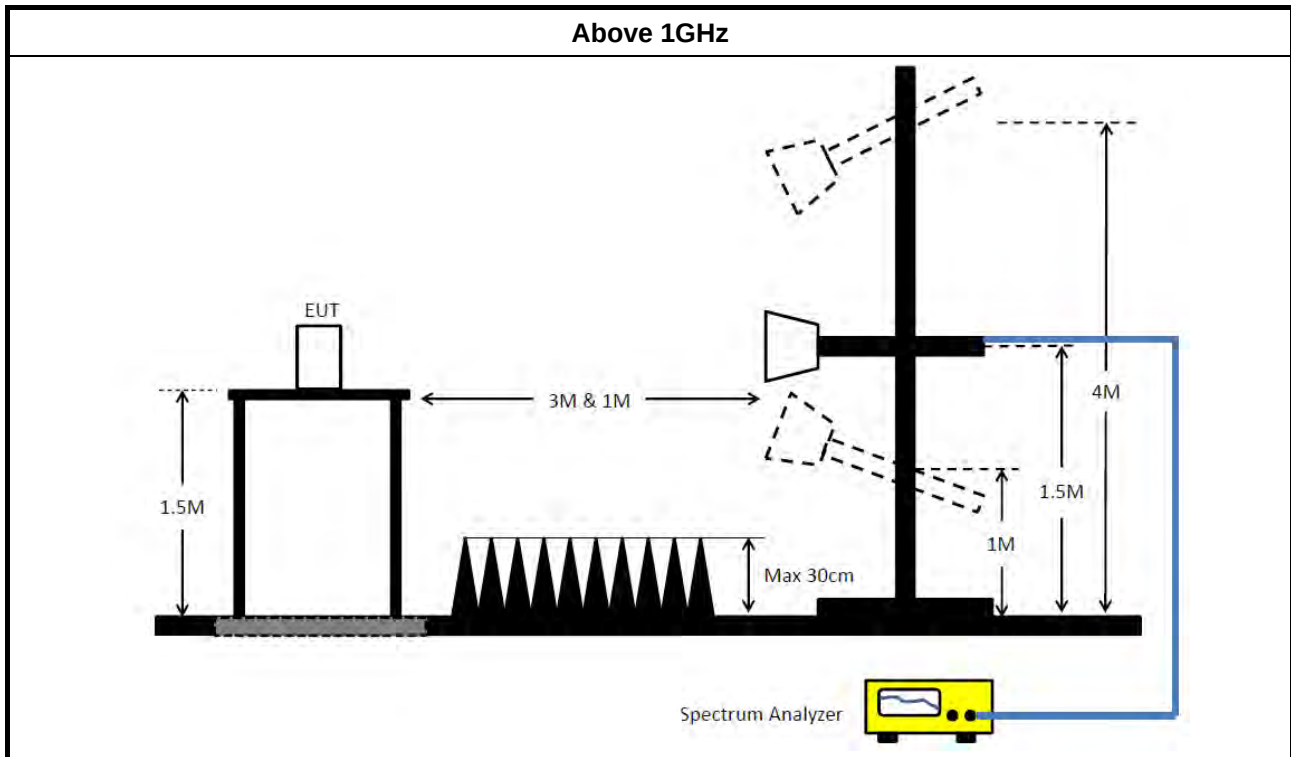
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
Refer as ANSI C63.10, clause 6.9.2.2 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle $\geq 98\%$)
	☐ Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
	☒ Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW $\geq 1/T$).
	☐ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
	☒ Refer as FCC KDB 558074, clause 12.2.4 measurement procedure peak limit.
For the transmitter band-edge emissions shall be measured using following options below:	
	Refer as FCC KDB 558074 clause 13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	Refer as FCC KDB 558074, clause 13.2 (ANSI C63.10, clause 6.9.3) for marker-delta method for band-edge measurements.
	Refer as FCC KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
For conducted and cabinet radiation measurement, refer as FCC KDB 558074, clause 12.2.2.	
	For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add $10 \log(N)$ dB
	For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.6.4 Test Setup





3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

3.6.6 Test Result of Transmitter Radiated Unwanted Emissions

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 23, 2016	Nov. 22, 2017	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 15, 2016	Nov. 14, 2017	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Jan. 16, 2017	Jan. 15, 2018	Conduction (CO02-CB)
COND Cable	Woken	Cable	01	0.15MHz ~ 30MHz	Nov. 30, 2016	Nov. 29, 2017	Conduction (CO02-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F	9561-F073	9kHz ~ 30MHz	Sep. 29, 2016	Sep. 28, 2017	Conduction (CO02-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCi	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2017	Aug. 29, 2018	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz ~ 30 MHz	Mar. 16, 2016*	Mar. 15, 2018*	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Nov. 09, 2017	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 05, 2017	Jul. 04, 2018	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2017	May 01, 2018	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Jan. 15, 2018	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 10, 2017	Jul. 09, 2018	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 22, 2016	Nov. 21, 2017	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 06, 2017	May 05, 2018	Radiation (03CH01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCi	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2017	Aug. 29, 2018	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Nov. 09, 2017	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 05, 2017	Jul. 04, 2018	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2017	May 01, 2018	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Jan. 15, 2018	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 10, 2017	Jul. 09, 2018	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 22, 2016	Nov. 21, 2017	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 06, 2017	May 05, 2018	Radiation (03CH01-CB)



FCC Test Report

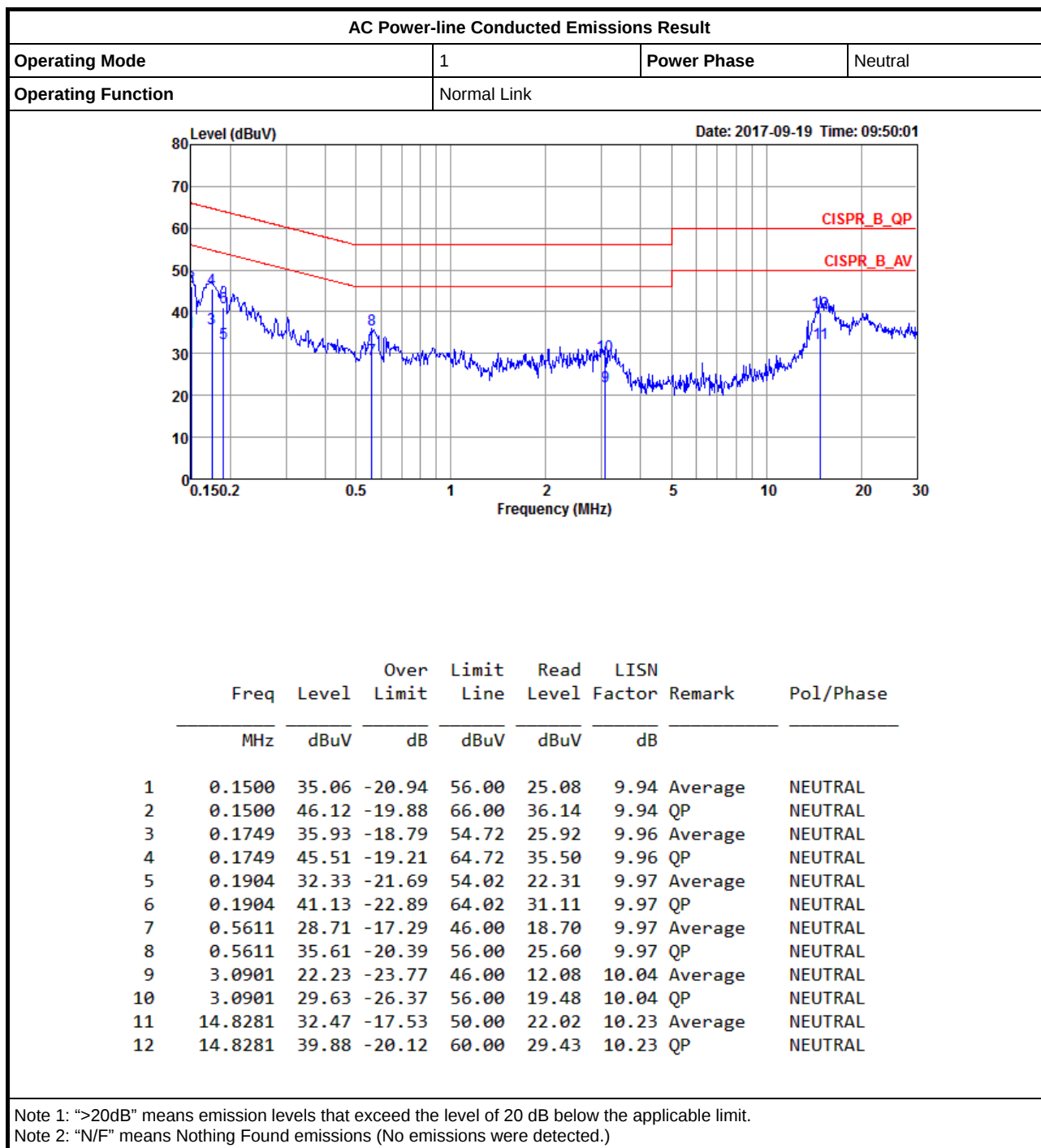
Report No. : FR791103AA

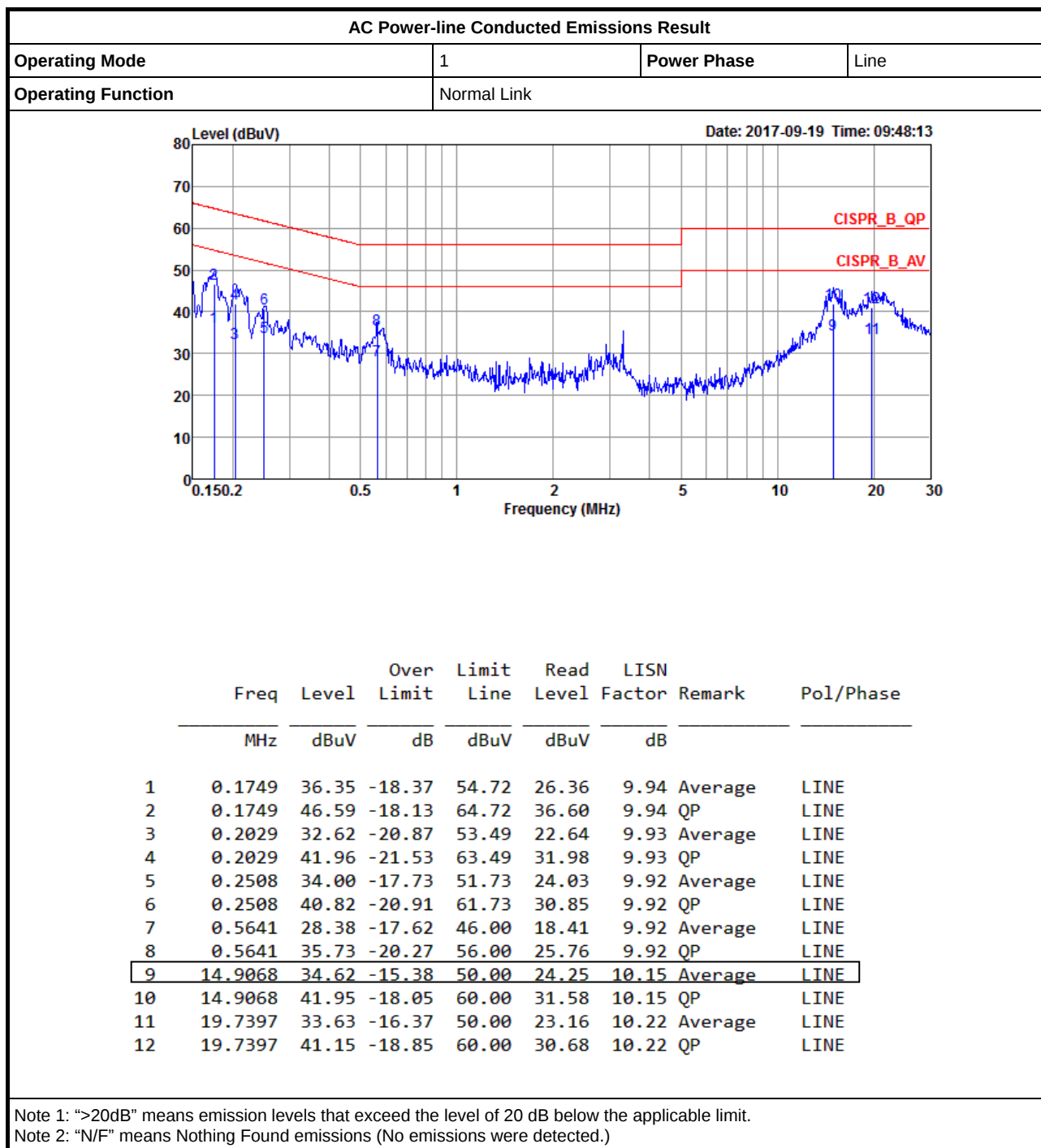
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum analyzer	R&S	FSV40	100979	9kHz-40GHz	Dec. 26, 2016	Dec. 25, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz-18GHz	Nov. 22, 2016	Nov. 21, 2017	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.

“*” Calibration Interval of instruments listed above is two years.

NCR means Non-Calibration required.





Summary

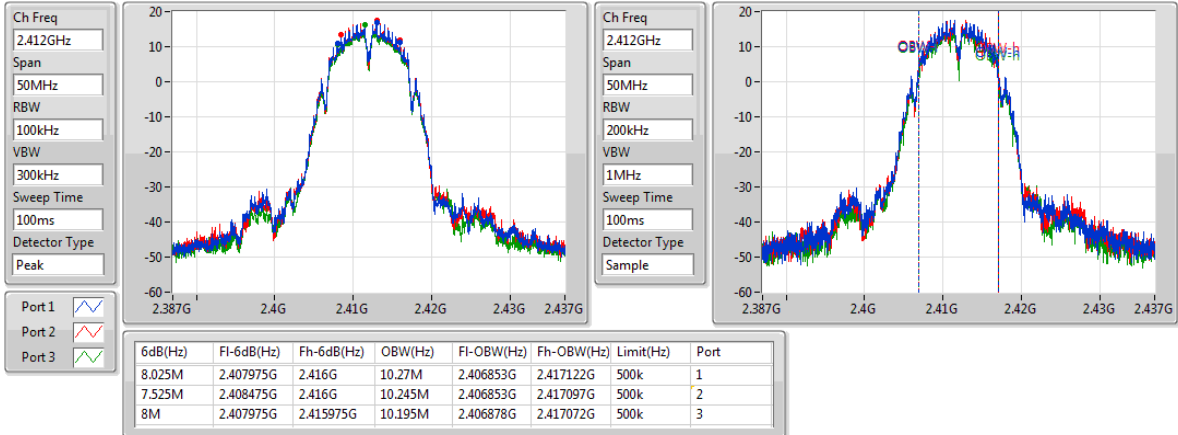
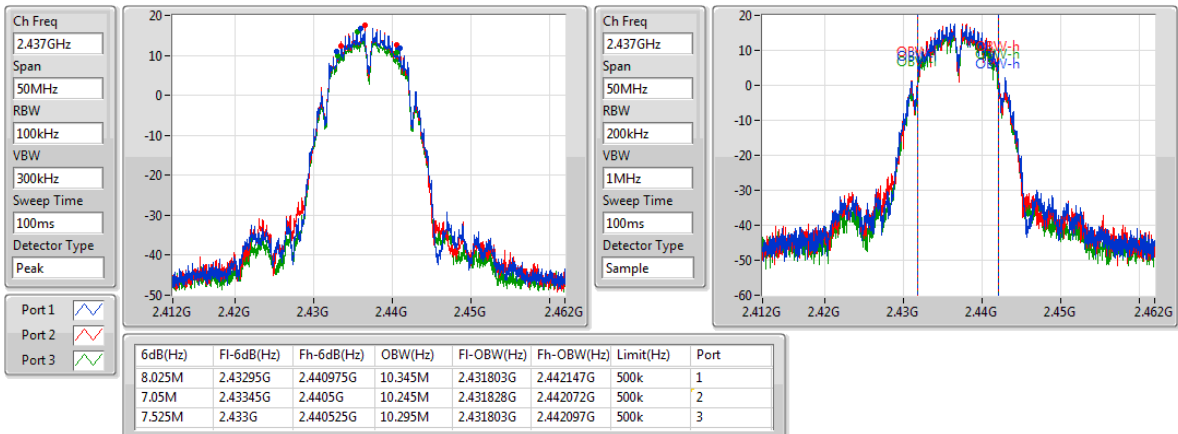
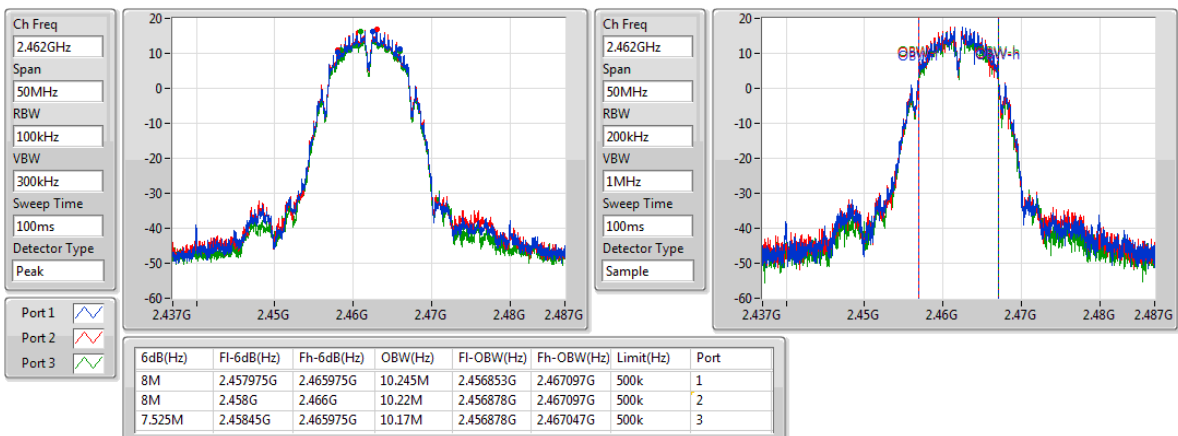
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
11b_Nss1,(1Mbps)_3TX	8.025M	10.345M	10M3G1D	7.05M	10.17M
11g_Nss1,(6Mbps)_3TX	16.3M	16.442M	16M4D1D	14M	16.317M
VHT20_Nss1,(MCS0)_3TX	16.9M	17.616M	17M6D1D	13.825M	17.491M
VHT40_Nss1,(MCS0)_3TX	36.35M	36.282M	36M3D1D	35.65M	36.232M

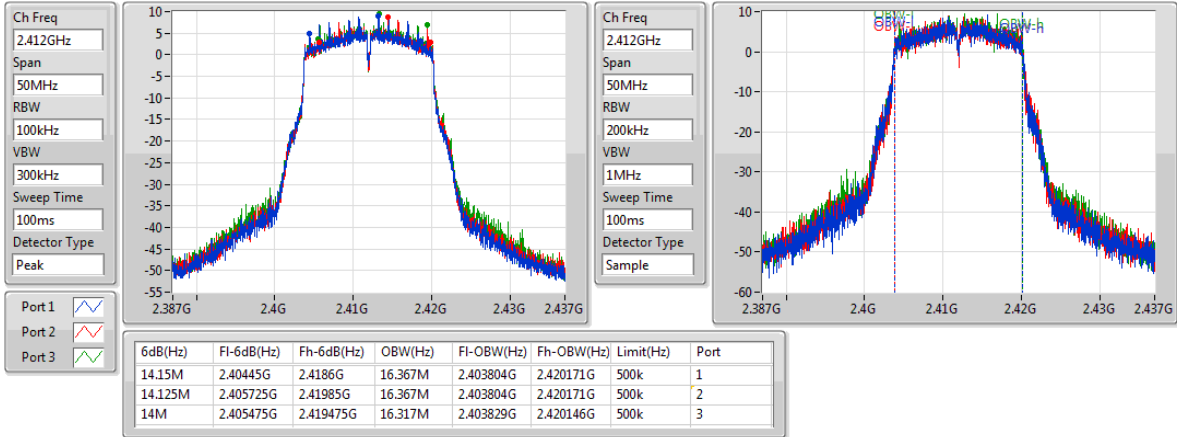
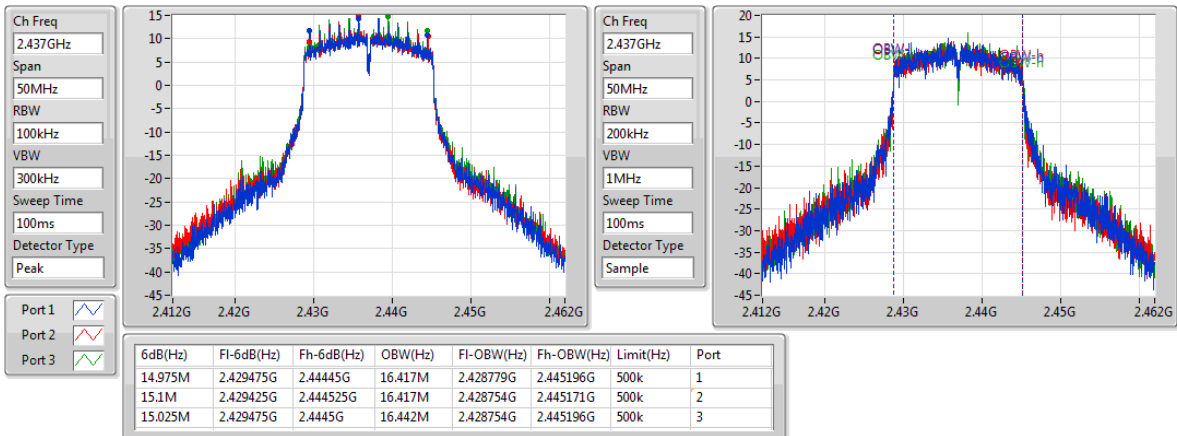
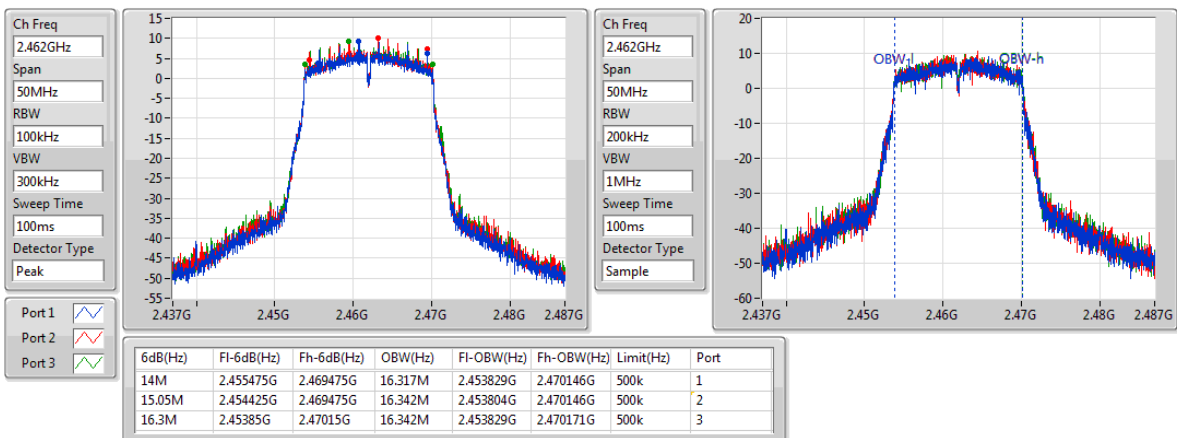
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

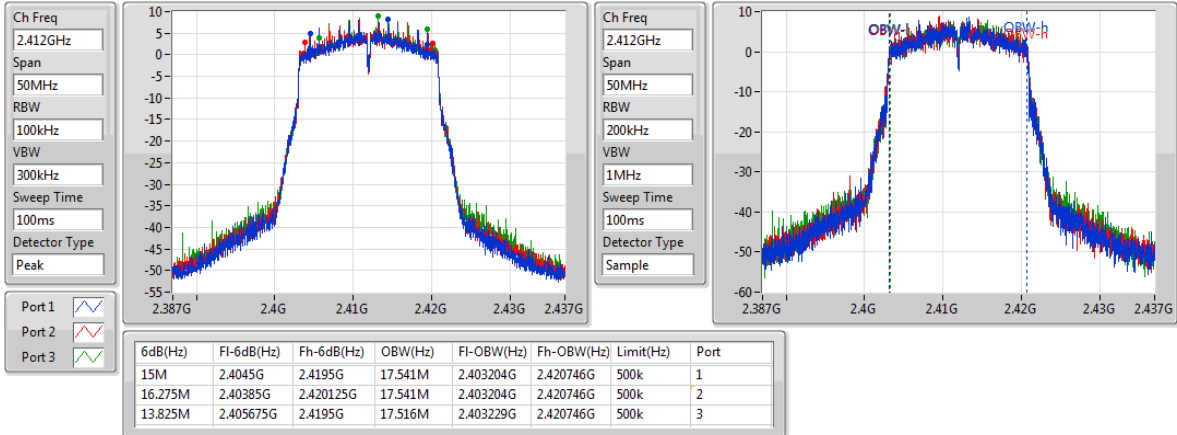
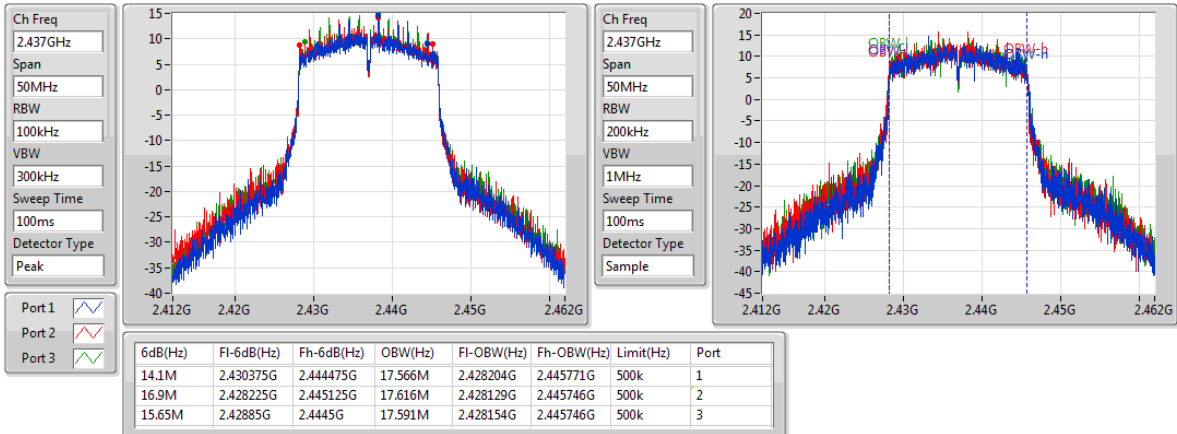
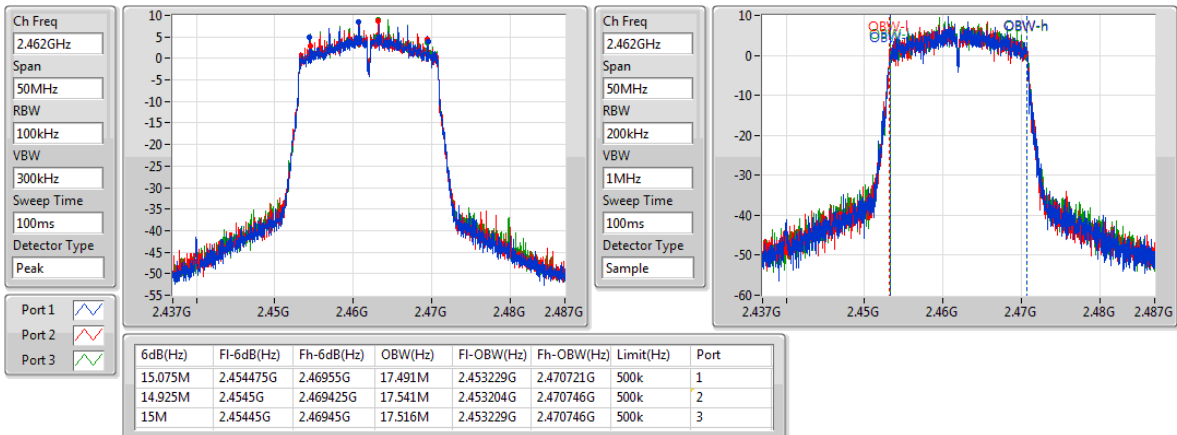
Result

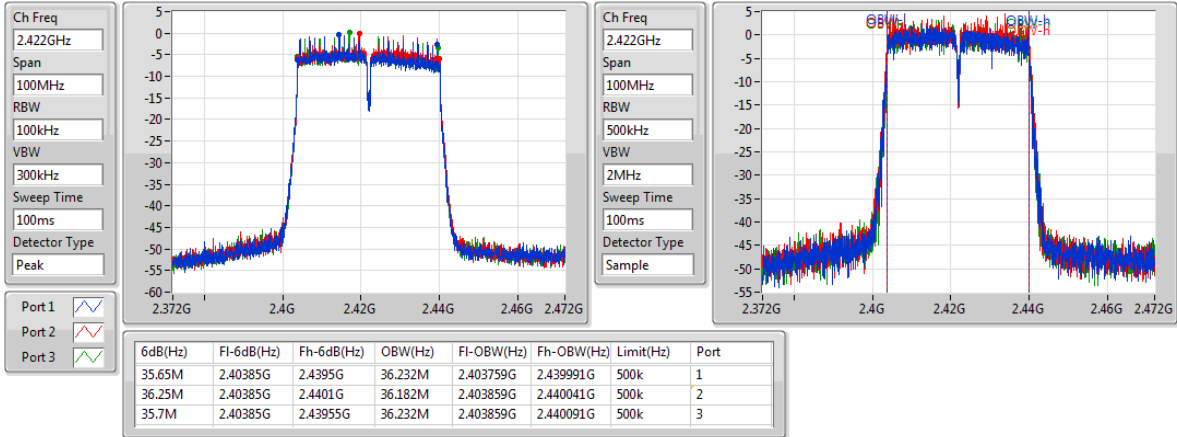
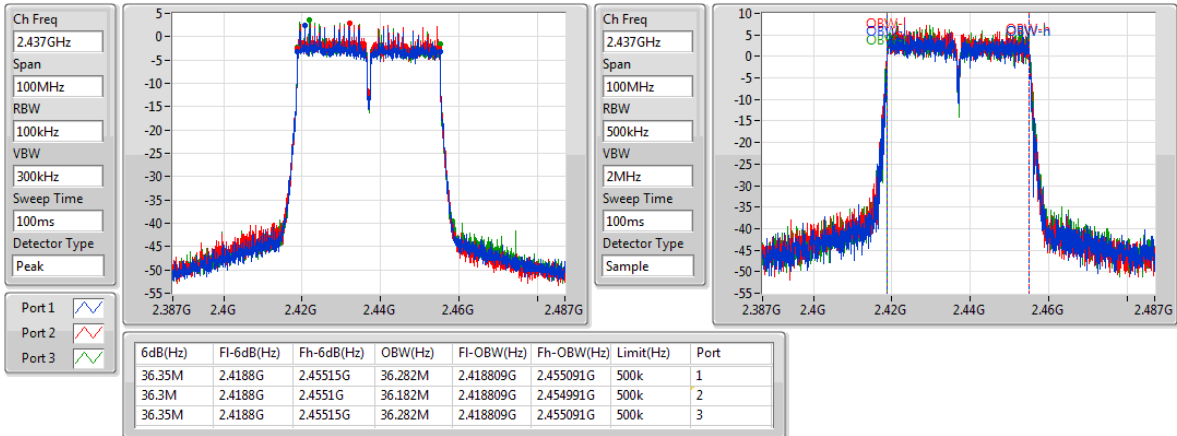
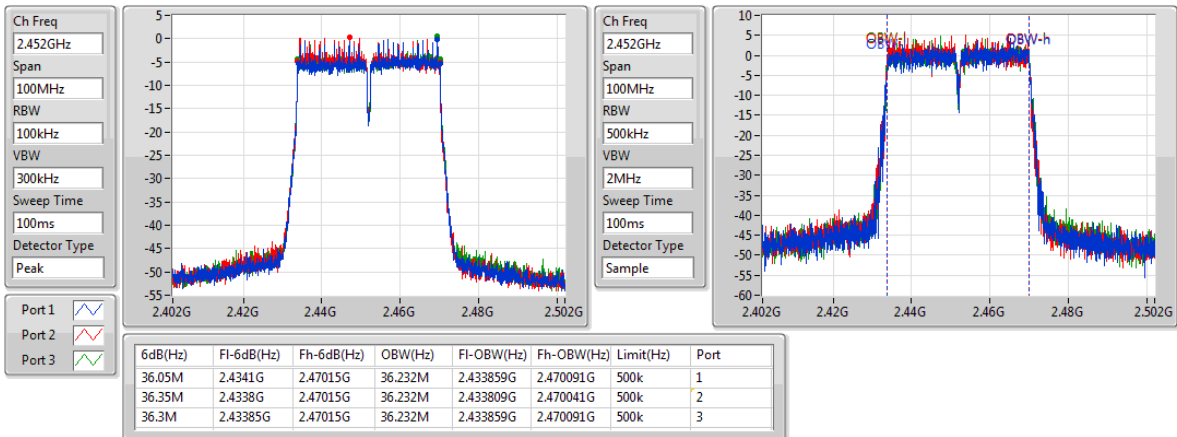
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	8.025M	10.27M	7.525M	10.245M	8M	10.195M
2437MHz	Pass	500k	8.025M	10.345M	7.05M	10.245M	7.525M	10.295M
2462MHz	Pass	500k	8M	10.245M	8M	10.22M	7.525M	10.17M
11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	14.15M	16.367M	14.125M	16.367M	14M	16.317M
2437MHz	Pass	500k	14.975M	16.417M	15.1M	16.417M	15.025M	16.442M
2462MHz	Pass	500k	14M	16.317M	15.05M	16.342M	16.3M	16.342M
VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	15M	17.541M	16.275M	17.541M	13.825M	17.516M
2437MHz	Pass	500k	14.1M	17.566M	16.9M	17.616M	15.65M	17.591M
2462MHz	Pass	500k	15.075M	17.491M	14.925M	17.541M	15M	17.516M
VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	35.65M	36.232M	36.25M	36.182M	35.7M	36.232M
2437MHz	Pass	500k	36.35M	36.282M	36.3M	36.182M	36.35M	36.282M
2452MHz	Pass	500k	36.05M	36.232M	36.35M	36.232M	36.3M	36.232M

Port X-N dB = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

11b_Nss1,(1Mbps)_3TX
EBW
2412MHz

11b_Nss1,(1Mbps)_3TX
EBW
2437MHz

11b_Nss1,(1Mbps)_3TX
EBW
2462MHz


11g_Nss1,(6Mbps)_3TX
EBW
2412MHz

11g_Nss1,(6Mbps)_3TX
EBW
2437MHz

11g_Nss1,(6Mbps)_3TX
EBW
2462MHz


VHT20_Nss1,(MCS0)_3TX
EBW
2412MHz

VHT20_Nss1,(MCS0)_3TX
EBW
2437MHz

VHT20_Nss1,(MCS0)_3TX
EBW
2462MHz


VHT40_Nss1,(MCS0)_3TX
EBW
2422MHz

VHT40_Nss1,(MCS0)_3TX
EBW
2437MHz

VHT40_Nss1,(MCS0)_3TX
EBW
2452MHz


Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
11b_Nss1,(1Mbps)_3TX	29.79	0.95279
11g_Nss1,(6Mbps)_3TX	29.82	0.95940
VHT20_Nss1,(MCS0)_3TX	29.80	0.95499
VHT40_Nss1,(MCS0)_3TX	21.51	0.14158

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	1.80	25.36	25.31	24.26	29.78	30.00
2437MHz	Pass	1.80	25.32	25.39	24.24	29.79	30.00
2462MHz	Pass	1.80	24.95	25.17	24.03	29.52	30.00
11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	1.80	19.25	19.57	19.86	24.34	30.00
2437MHz	Pass	1.80	24.81	25.04	25.27	29.82	30.00
2462MHz	Pass	1.80	20.03	20.38	20.59	25.11	30.00
VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	1.80	18.72	18.94	19.16	23.71	30.00
2437MHz	Pass	1.80	24.68	25.03	25.35	29.80	30.00
2462MHz	Pass	1.80	18.74	18.85	19.25	23.72	30.00
VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	1.80	13.32	13.74	13.65	18.34	30.00
2437MHz	Pass	1.80	16.34	16.89	16.97	21.51	30.00
2452MHz	Pass	1.80	13.87	14.36	14.28	18.95	30.00

DG = Directional Gain; **Port X** = Port X output power

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
11b_Nss1,(1Mbps)_3TX	5.60
11g_Nss1,(6Mbps)_3TX	4.58
VHT20_Nss1,(MCS0)_3TX	3.44
VHT40_Nss1,(MCS0)_3TX	-7.81

RBW=3kHz.

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.57	3.59	2.72	1.31	5.60	7.43
2437MHz	Pass	6.57	3.42	2.75	2.20	5.58	7.43
2462MHz	Pass	6.57	2.76	2.33	2.03	5.07	7.43
11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.57	-6.32	-5.02	-5.13	-1.26	7.43
2437MHz	Pass	6.57	0.76	0.51	0.40	4.58	7.43
2462MHz	Pass	6.57	-4.80	-3.68	-3.91	0.12	7.43
VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.57	-5.54	-5.04	-5.31	-2.61	7.43
2437MHz	Pass	6.57	-0.12	0.53	0.42	3.44	7.43
2462MHz	Pass	6.57	-5.81	-5.18	-5.11	-2.55	7.43
VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	6.57	-14.70	-14.42	-14.38	-11.49	7.43
2437MHz	Pass	6.57	-11.66	-10.58	-11.55	-7.81	7.43
2452MHz	Pass	6.57	-14.50	-13.24	-14.17	-10.89	7.43

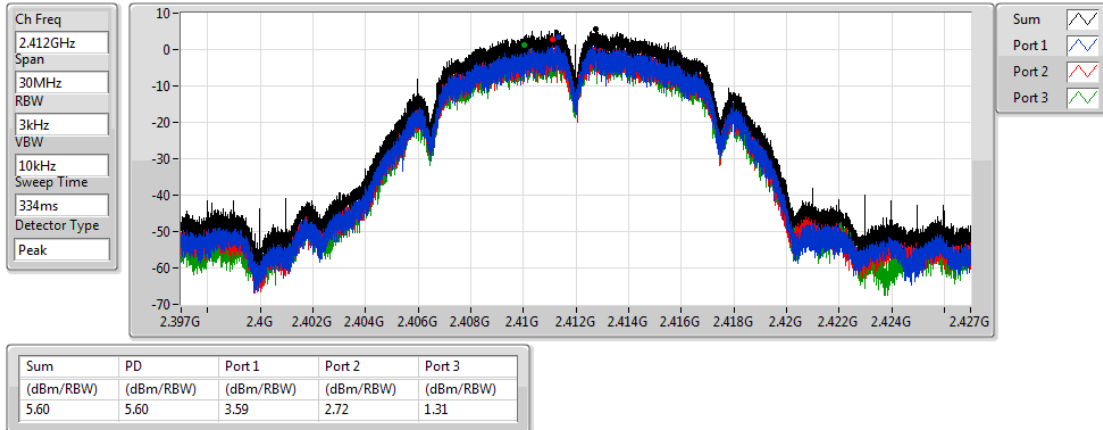
DG = Directional Gain; RBW=3kHz;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

11b_Nss1,(1Mbps)_3TX

PSD

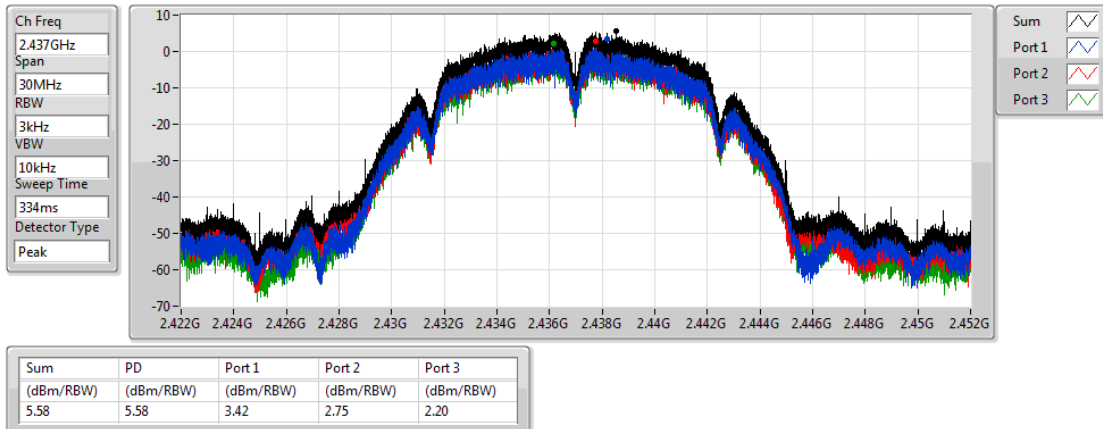
2412MHz



11b_Nss1,(1Mbps)_3TX

PSD

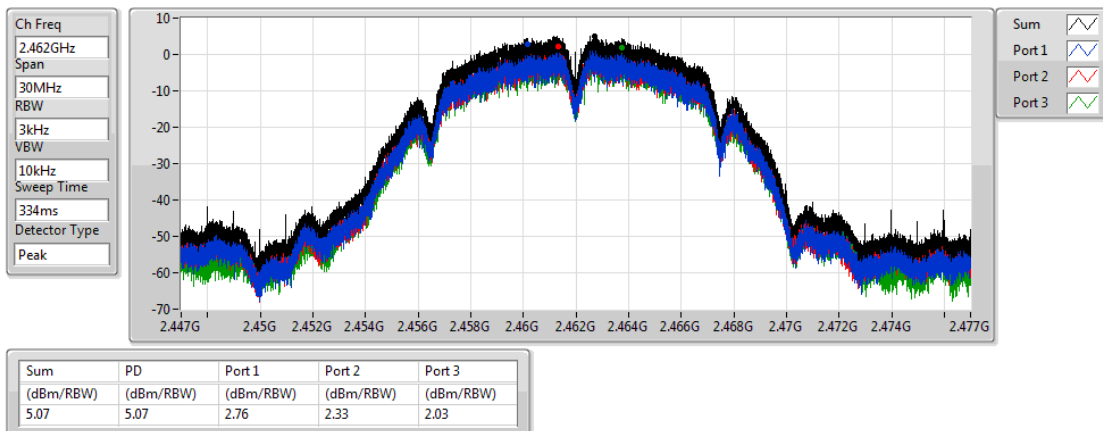
2437MHz



11b_Nss1,(1Mbps)_3TX

PSD

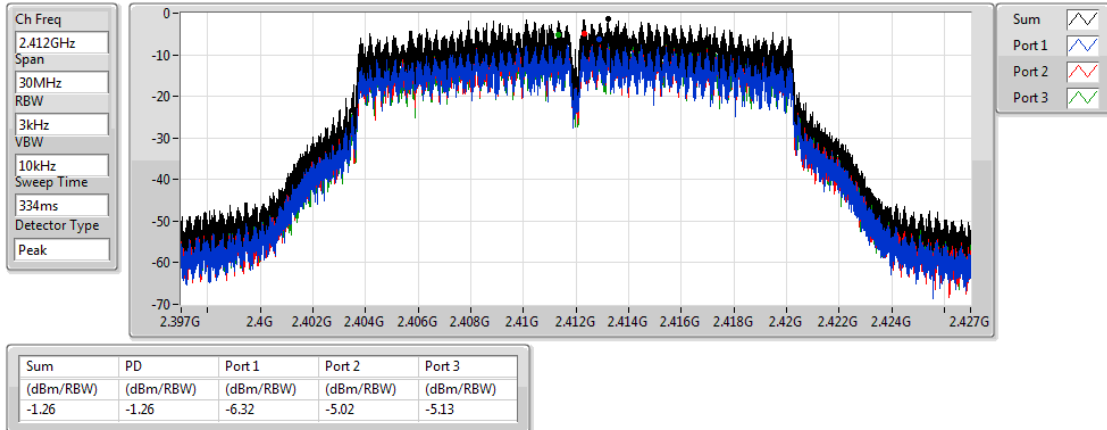
2462MHz



11g_Nss1,(6Mbps)_3TX

PSD

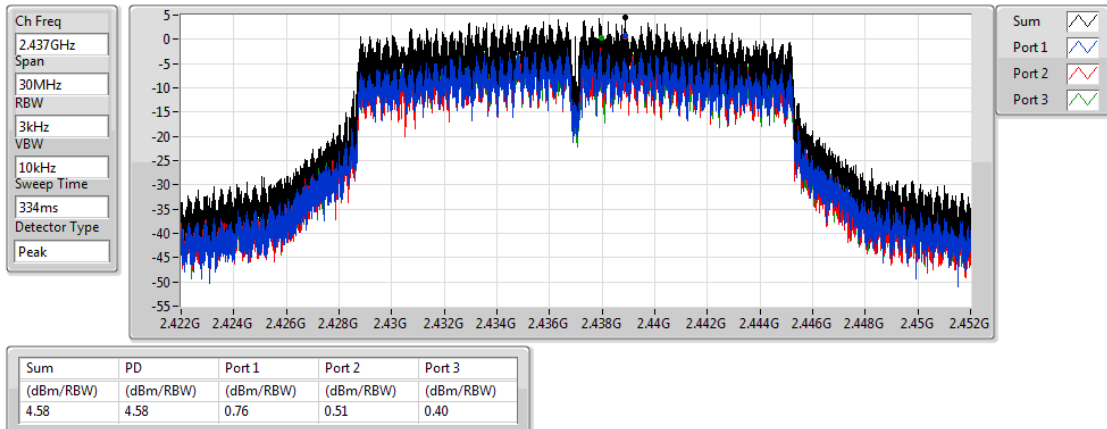
2412MHz



11g_Nss1,(6Mbps)_3TX

PSD

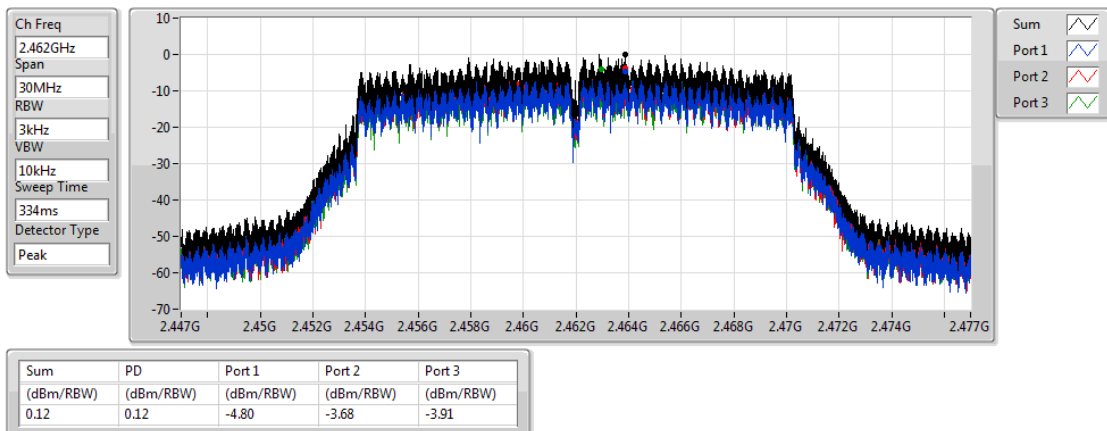
2437MHz



11g_Nss1,(6Mbps)_3TX

PSD

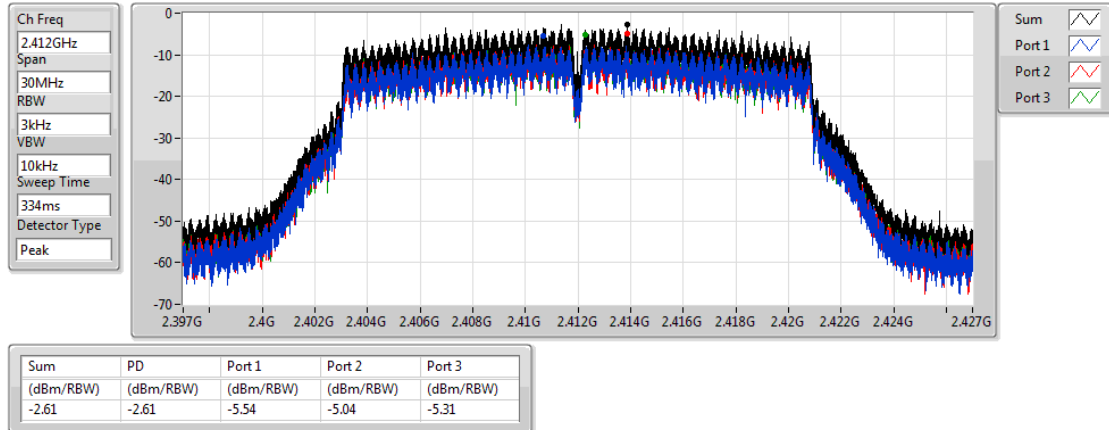
2462MHz



VHT20_Nss1,(MCS0)_3TX

PSD

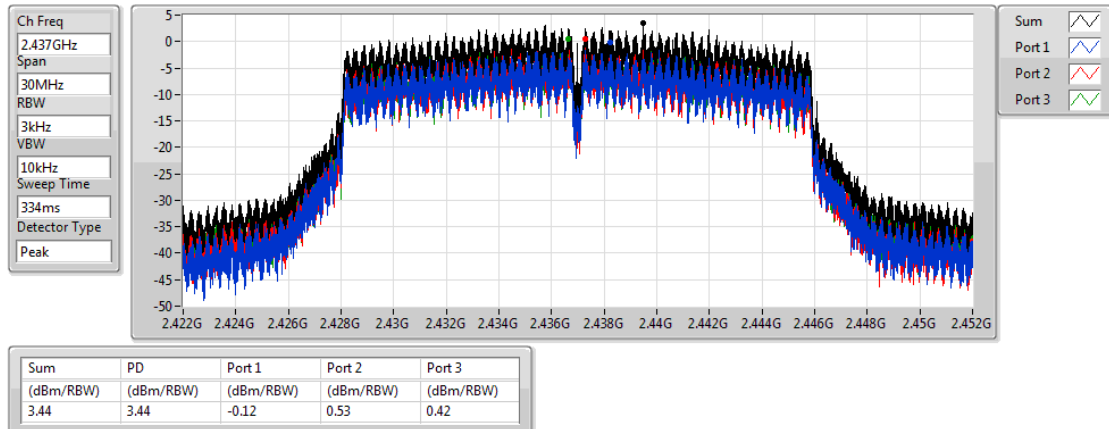
2412MHz



VHT20_Nss1,(MCS0)_3TX

PSD

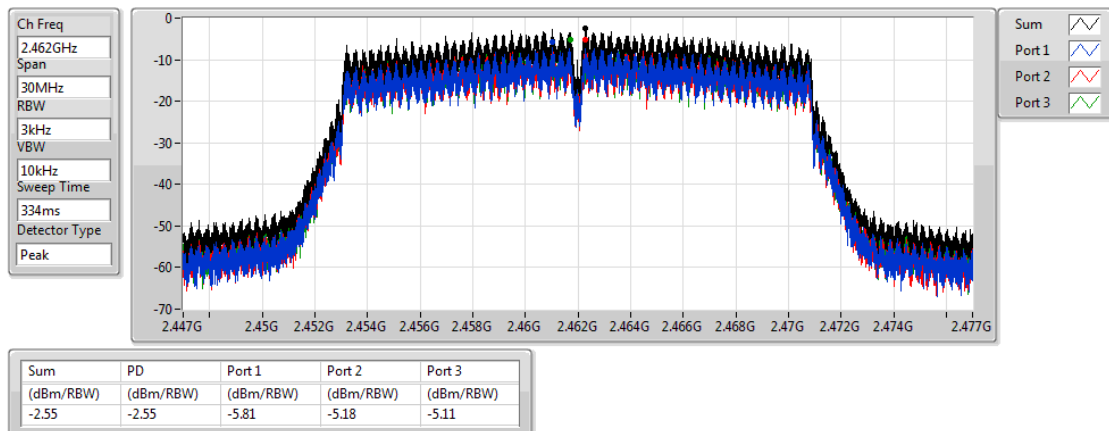
2437MHz



VHT20_Nss1,(MCS0)_3TX

PSD

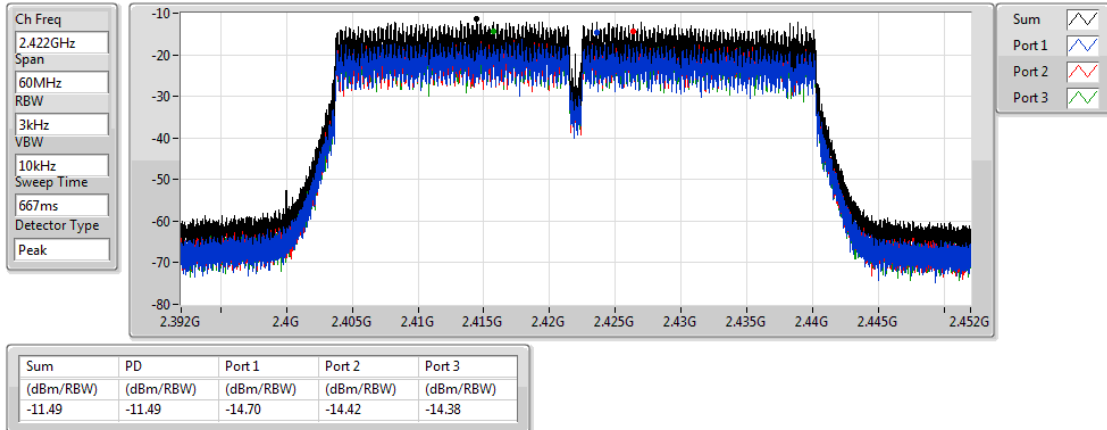
2462MHz



VHT40_Nss1,(MCS0)_3TX

PSD

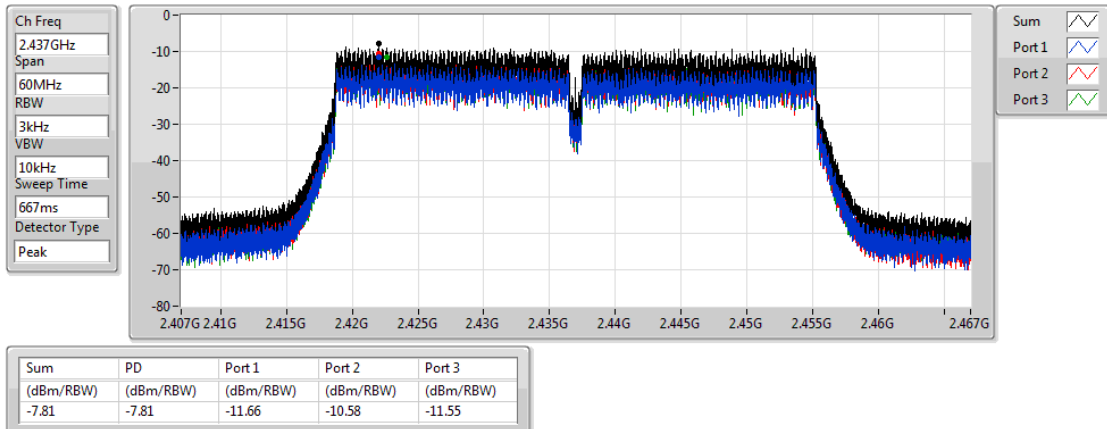
2422MHz



VHT40_Nss1,(MCS0)_3TX

PSD

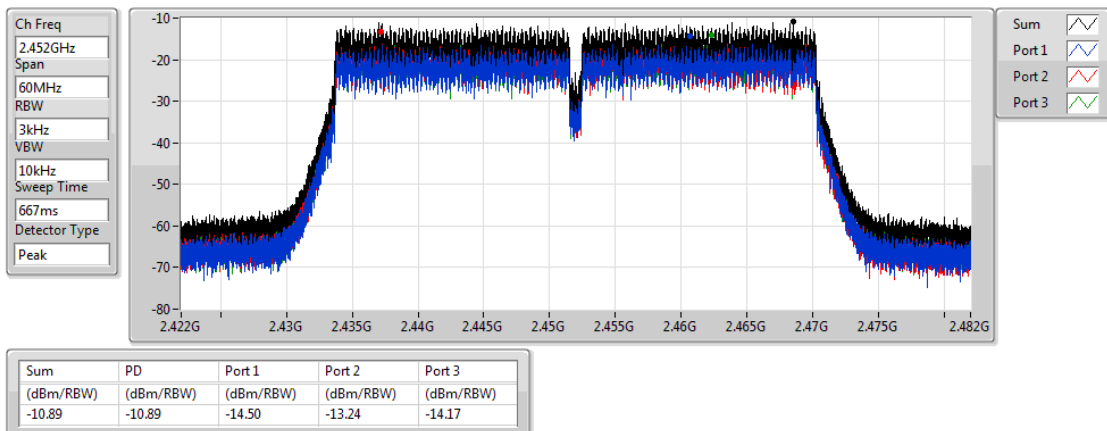
2437MHz



VHT40_Nss1,(MCS0)_3TX

PSD

2452MHz



Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
11b_Nss1,(1Mbps)_3TX	Pass	2.435404G	16.46	-13.54	543.765M	-59.53	2.39904G	-29.99	2.48734G	-43.33	7.232327G	-42.56	1
11g_Nss1,(6Mbps)_3TX	Pass	2.438243G	14.52	-15.48	1.871865G	-60.82	2.39888G	-32.40	2.4879G	-56.14	24.775235G	-53.01	3
VHT20_Nss1,(MCS0)_3TX	Pass	2.435738G	14.87	-15.13	374.84M	-61.63	2.39976G	-34.09	2.48734G	-45.21	12.899214G	-52.55	3
VHT40_Nss1,(MCS0)_3TX	Pass	2.421877G	2.98	-27.02	2.309695G	-60.75	2.39952G	-43.08	2.48462G	-49.83	5.174548G	-51.17	3

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.435404G	16.46	-13.54	543.765M	-59.53	2.39904G	-29.99	2.48734G	-43.33	7.232327G	-42.56	1
2412MHz	Pass	2.435404G	16.46	-13.54	2.30641G	-60.92	2.39752G	-31.87	2.48734G	-45.32	7.235136G	-44.81	2
2412MHz	Pass	2.435404G	16.46	-13.54	2.14098G	-60.47	2.39704G	-36.19	2.48734G	-48.21	7.235136G	-44.54	3
2437MHz	Pass	2.435404G	16.46	-13.54	892.1M	-59.22	2.39128G	-50.50	2.51318G	-50.12	16.708981G	-52.00	1
2437MHz	Pass	2.435404G	16.46	-13.54	2.30641G	-60.85	2.39136G	-48.29	2.48398G	-50.35	5.304967G	-50.38	2
2437MHz	Pass	2.435404G	16.46	-13.54	2.307575G	-60.71	2.3976G	-52.03	2.51318G	-47.55	5.316205G	-47.76	3
2462MHz	Pass	2.435404G	16.46	-13.54	2.14331G	-57.11	2.3996G	-52.75	2.48414G	-44.78	17.394514G	-52.01	1
2462MHz	Pass	2.435404G	16.46	-13.54	2.17826G	-61.23	2.39192G	-52.80	2.48518G	-44.92	23.533408G	-52.60	2
2462MHz	Pass	2.435404G	16.46	-13.54	2.165445G	-60.79	2.39256G	-54.44	2.48534G	-47.37	16.343738G	-51.79	3
11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.438243G	14.52	-15.48	2.30874G	-61.40	2.39952G	-32.77	2.48734G	-46.88	16.706172G	-52.42	1
2412MHz	Pass	2.438243G	14.52	-15.48	685.895M	-60.91	2.39952G	-32.55	2.48734G	-46.98	16.745505G	-52.19	2
2412MHz	Pass	2.438243G	14.52	-15.48	1.871865G	-60.82	2.39888G	-32.40	2.4879G	-56.14	24.775235G	-53.01	3
2437MHz	Pass	2.438243G	14.52	-15.48	2.16661G	-60.67	2.39832G	-46.01	2.48558G	-49.49	24.151512G	-52.85	1
2437MHz	Pass	2.438243G	14.52	-15.48	684.73M	-60.97	2.39928G	-42.99	2.48398G	-47.44	21.535809G	-53.00	2
2437MHz	Pass	2.438243G	14.52	-15.48	2.30408G	-61.16	2.39992G	-44.62	2.48374G	-48.56	24.792092G	-52.11	3
2462MHz	Pass	2.438243G	14.52	-15.48	625.315M	-60.69	2.39936G	-55.74	2.48382G	-47.26	16.745505G	-52.07	1
2462MHz	Pass	2.438243G	14.52	-15.48	942.195M	-61.03	2.39992G	-54.19	2.48582G	-46.47	16.635932G	-52.47	2
2462MHz	Pass	2.438243G	14.52	-15.48	1.631875G	-61.05	2.39024G	-55.30	2.48382G	-46.62	24.876379G	-52.09	3
VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.435738G	14.87	-15.13	226.885M	-60.72	2.39984G	-35.70	2.48734G	-49.19	21.780241G	-52.64	1
2412MHz	Pass	2.435738G	14.87	-15.13	930.545M	-60.62	2.39984G	-34.57	2.48734G	-51.52	16.77922G	-52.68	2
2412MHz	Pass	2.435738G	14.87	-15.13	374.84M	-61.63	2.39976G	-34.09	2.48734G	-45.21	12.899214G	-52.55	3
2437MHz	Pass	2.435738G	14.87	-15.13	2.30408G	-59.30	2.39552G	-42.61	2.51318G	-49.25	21.828004G	-52.73	1
2437MHz	Pass	2.435738G	14.87	-15.13	2.307575G	-59.05	2.39792G	-41.24	2.51318G	-47.41	16.613456G	-51.86	2
2437MHz	Pass	2.435738G	14.87	-15.13	908.41M	-60.78	2.39912G	-42.08	2.51318G	-47.69	16.624694G	-53.22	3
2462MHz	Pass	2.435738G	14.87	-15.13	664.925M	-61.11	2.39192G	-56.64	2.48414G	-48.05	17.695138G	-51.97	1
2462MHz	Pass	2.435738G	14.87	-15.13	854.82M	-60.72	2.39992G	-55.79	2.48598G	-43.47	21.507714G	-52.48	2
2462MHz	Pass	2.435738G	14.87	-15.13	310.765M	-49.31	2.39432G	-56.49	2.48374G	-47.52	5.15606G	-49.68	3
VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.421877G	2.98	-27.02	2.17802G	-61.36	2.39984G	-47.12	2.49182G	-55.02	24.77844G	-52.09	1
2422MHz	Pass	2.421877G	2.98	-27.02	888.75M	-60.52	2.39712G	-46.89	2.48974G	-54.75	5.311971G	-47.08	2
2422MHz	Pass	2.421877G	2.98	-27.02	903.635M	-60.05	2.39968G	-47.29	2.4859G	-55.83	21.701835G	-52.76	3
2437MHz	Pass	2.421877G	2.98	-27.02	936.84M	-61.40	2.39952G	-43.89	2.48782G	-50.41	16.737759G	-52.08	1
2437MHz	Pass	2.421877G	2.98	-27.02	360.905M	-53.86	2.39984G	-44.78	2.48702G	-50.99	17.688506G	-52.63	2
2437MHz	Pass	2.421877G	2.98	-27.02	2.309695G	-60.75	2.39952G	-43.08	2.48462G	-49.83	5.174548G	-51.17	3
2452MHz	Pass	2.421877G	2.98	-27.02	896.765M	-58.81	2.39952G	-52.05	2.48542G	-50.20	5.180157G	-48.68	1
2452MHz	Pass	2.421877G	2.98	-27.02	791.425M	-60.89	2.39968G	-52.11	2.48446G	-48.82	24.441892G	-53.08	2



CSE Non-restricted Band Result

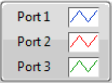
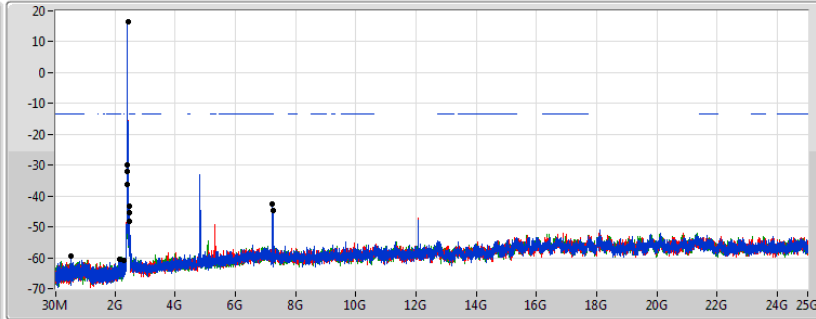
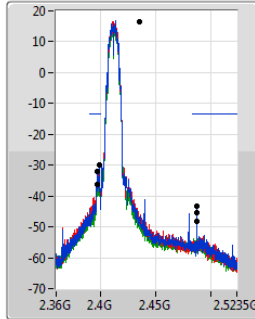
Appendix E

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2452MHz	Pass	2.421877G	2.98	-27.02	721.58M	-60.26	2.39808G	-52.89	2.48478G	-47.67	16.734954G	-52.12	3

11b_Nss1,(1Mbps)_3TX

CSE NdB

2412MHz

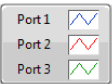
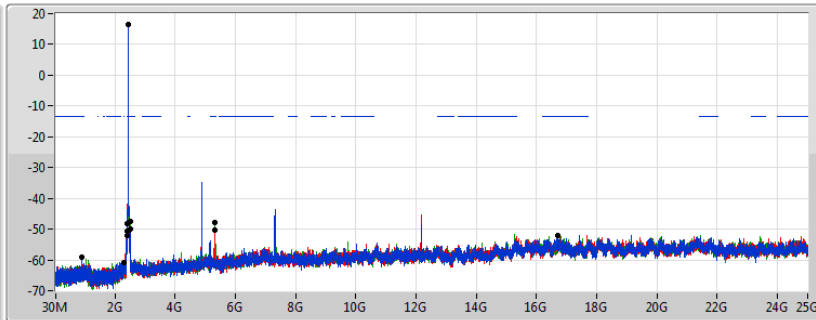
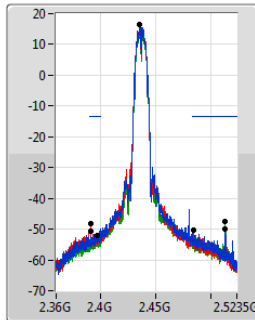


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435404G	16.46	-13.54	543.765M	-59.53	2.39904G	-29.99	2.48734G	-43.33	7.232327G	-42.56	1
2.435404G	16.46	-13.54	2.30641G	-60.92	2.39752G	-31.87	2.48734G	-45.32	7.235136G	-44.81	2
2.435404G	16.46	-13.54	2.14098G	-60.47	2.39704G	-36.19	2.48734G	-48.21	7.235136G	-44.54	3

11b_Nss1,(1Mbps)_3TX

CSE NdB

2437MHz

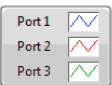
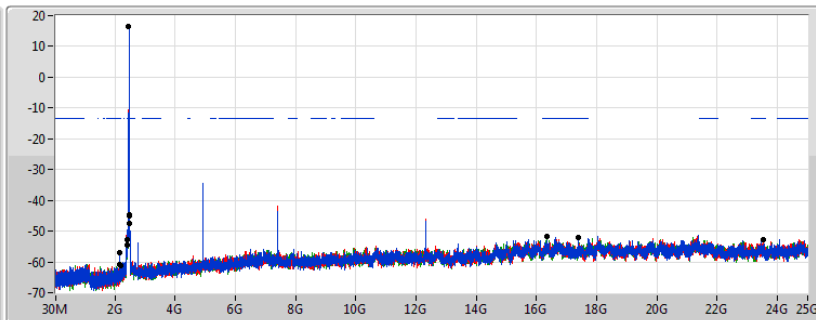
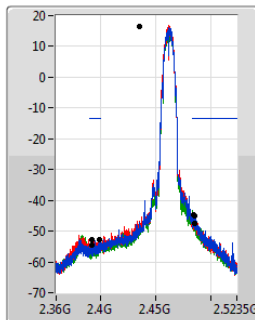


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435404G	16.46	-13.54	892.1M	-59.22	2.39128G	-50.50	2.51318G	-50.12	16.708981G	-52.00	1
2.435404G	16.46	-13.54	2.30641G	-60.85	2.39136G	-48.29	2.48398G	-50.35	5.304967G	-50.38	2
2.435404G	16.46	-13.54	2.307575G	-60.71	2.3976G	-52.03	2.51318G	-47.55	5.316205G	-47.76	3

11b_Nss1,(1Mbps)_3TX

CSE NdB

2462MHz

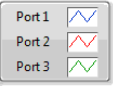
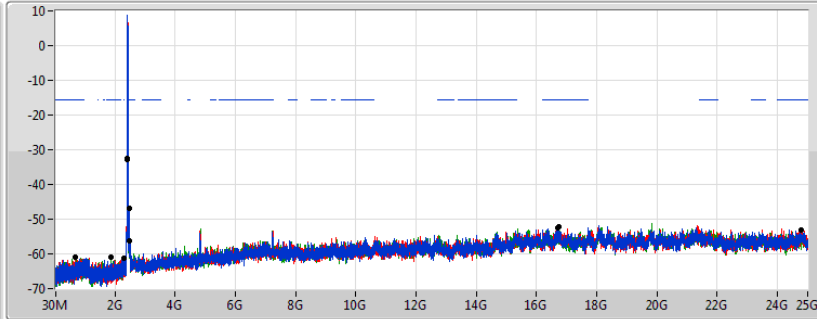
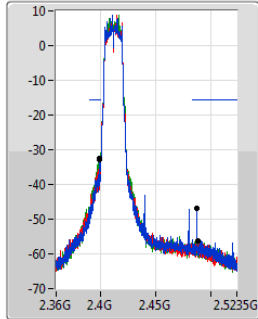


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435404G	16.46	-13.54	2.14331G	-57.11	2.3996G	-52.75	2.48414G	-44.78	17.394514G	-52.01	1
2.435404G	16.46	-13.54	2.17826G	-61.23	2.39192G	-52.80	2.48518G	-44.92	23.533408G	-52.60	2
2.435404G	16.46	-13.54	2.165445G	-60.79	2.39256G	-54.44	2.48534G	-47.37	16.343738G	-51.79	3

11g_Nss1,(6Mbps)_3TX

CSE NdB

2412MHz

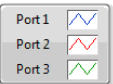
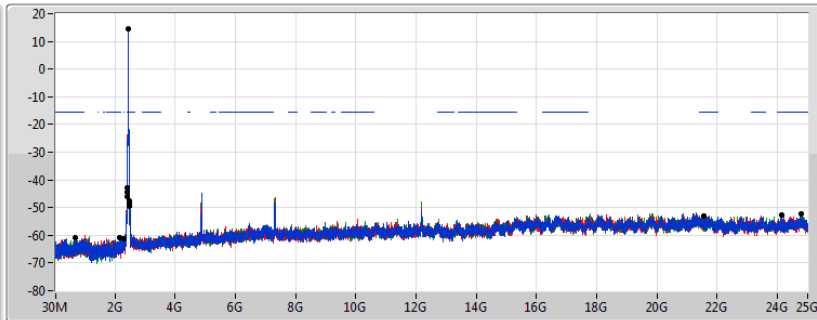
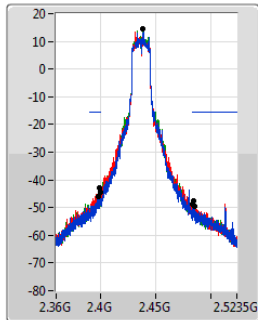


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.438243G	14.52	-15.48	2.30874G	-61.40	2.39952G	-32.77	2.48734G	-46.88	16.706172G	-52.42	1
2.438243G	14.52	-15.48	685.895M	-60.91	2.39952G	-32.55	2.48734G	-46.98	16.745505G	-52.19	2
2.438243G	14.52	-15.48	1.871865G	-60.82	2.39888G	-32.40	2.4879G	-56.14	24.775235G	-53.01	3

11g_Nss1,(6Mbps)_3TX

CSE NdB

2437MHz

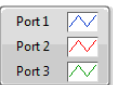
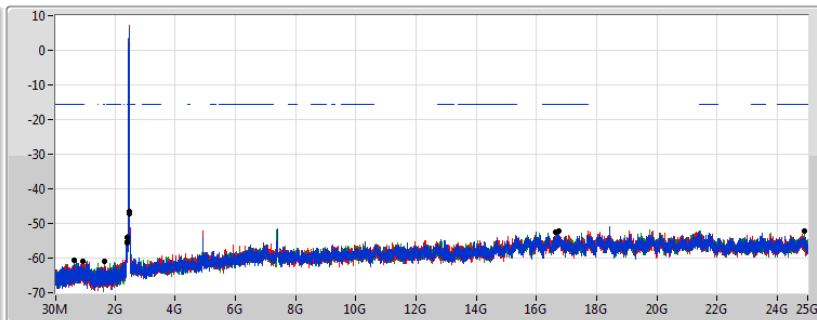
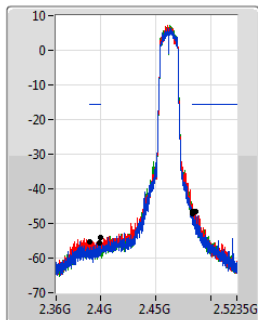


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.438243G	14.52	-15.48	2.16661G	-60.67	2.39832G	-46.01	2.48558G	-49.49	24.151512G	-52.85	1
2.438243G	14.52	-15.48	684.73M	-60.97	2.39928G	-42.99	2.48398G	-47.44	21.535809G	-53.00	2
2.438243G	14.52	-15.48	2.30408G	-61.16	2.39992G	-44.62	2.48374G	-48.56	24.792092G	-52.11	3

11g_Nss1,(6Mbps)_3TX

CSE NdB

2462MHz

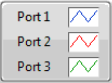
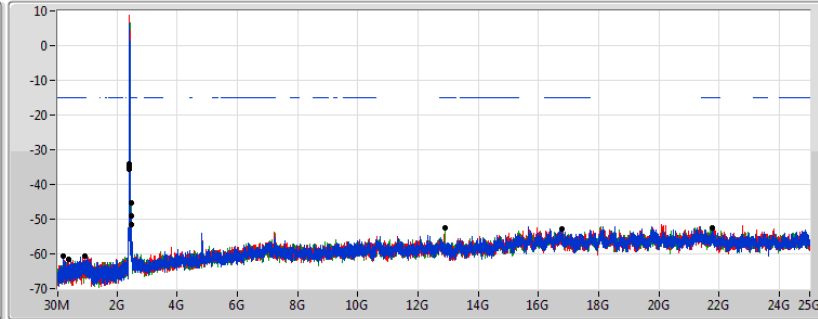
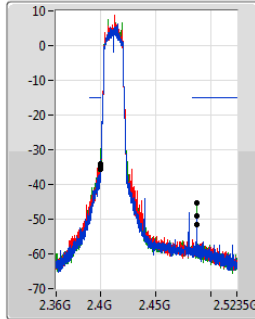


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.438243G	14.52	-15.48	625.315M	-60.69	2.39936G	-55.74	2.48382G	-47.26	16.745505G	-52.07	1
2.438243G	14.52	-15.48	942.195M	-61.03	2.39992G	-54.19	2.48582G	-46.47	16.635932G	-52.47	2
2.438243G	14.52	-15.48	1.631875G	-61.05	2.39024G	-55.30	2.48382G	-46.62	24.876379G	-52.09	3

VHT20_Nss1,(MCS0)_3TX

CSE NdB

2412MHz

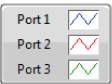
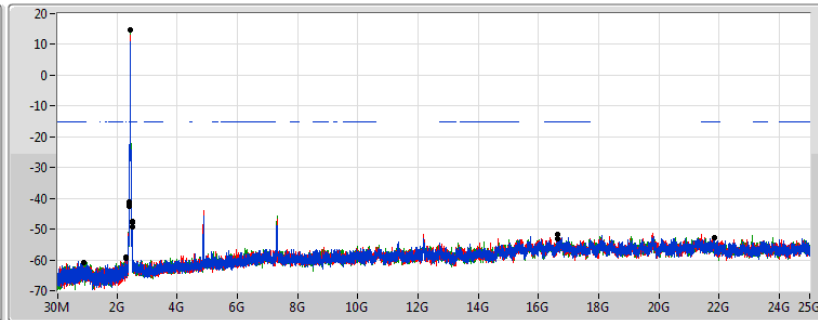
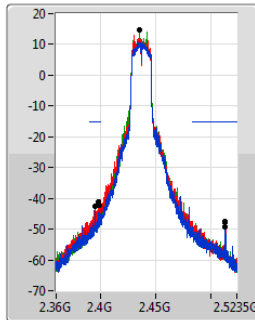


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435738G	14.87	-15.13	226.885M	-60.72	2.39984G	-35.70	2.48734G	-49.19	21.780241G	-52.64	1
2.435738G	14.87	-15.13	930.545M	-60.62	2.39984G	-34.57	2.48734G	-51.52	16.77922G	-52.68	2
2.435738G	14.87	-15.13	374.84M	-61.63	2.39976G	-34.09	2.48734G	-45.21	12.899214G	-52.55	3

VHT20_Nss1,(MCS0)_3TX

CSE NdB

2437MHz

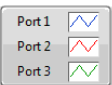
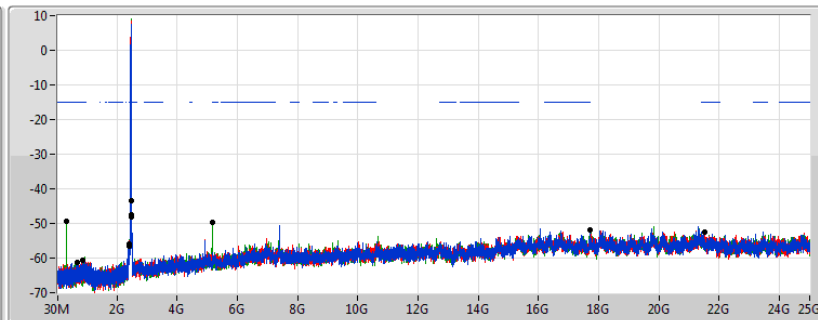
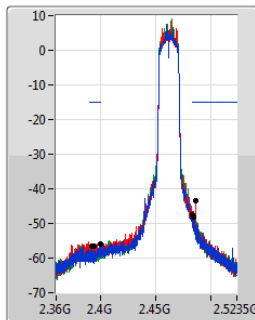


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435738G	14.87	-15.13	2.30408G	-59.30	2.39552G	-42.61	2.51318G	-49.25	21.828004G	-52.73	1
2.435738G	14.87	-15.13	2.307575G	-59.05	2.39792G	-41.24	2.51318G	-47.41	16.613456G	-51.86	2
2.435738G	14.87	-15.13	908.41M	-60.78	2.39912G	-42.08	2.51318G	-47.69	16.624694G	-53.22	3

VHT20_Nss1,(MCS0)_3TX

CSE NdB

2462MHz

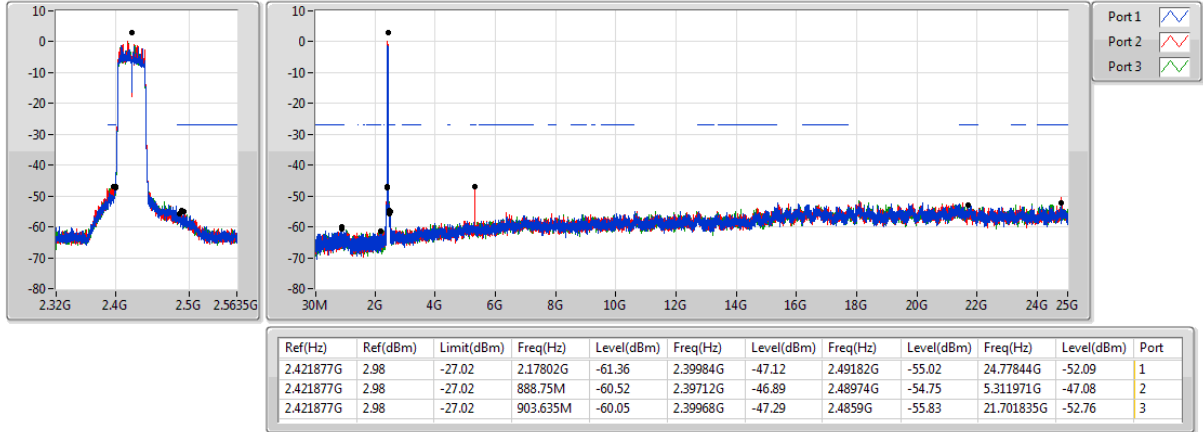


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435738G	14.87	-15.13	664.925M	-61.11	2.39192G	-56.64	2.48414G	-48.05	17.695138G	-51.97	1
2.435738G	14.87	-15.13	854.82M	-60.72	2.39992G	-55.79	2.48598G	-43.47	21.507714G	-52.48	2
2.435738G	14.87	-15.13	310.765M	-49.31	2.39432G	-56.49	2.48374G	-47.52	5.15606G	-49.68	3

VHT40_Nss1,(MCS0)_3TX

CSE NdB

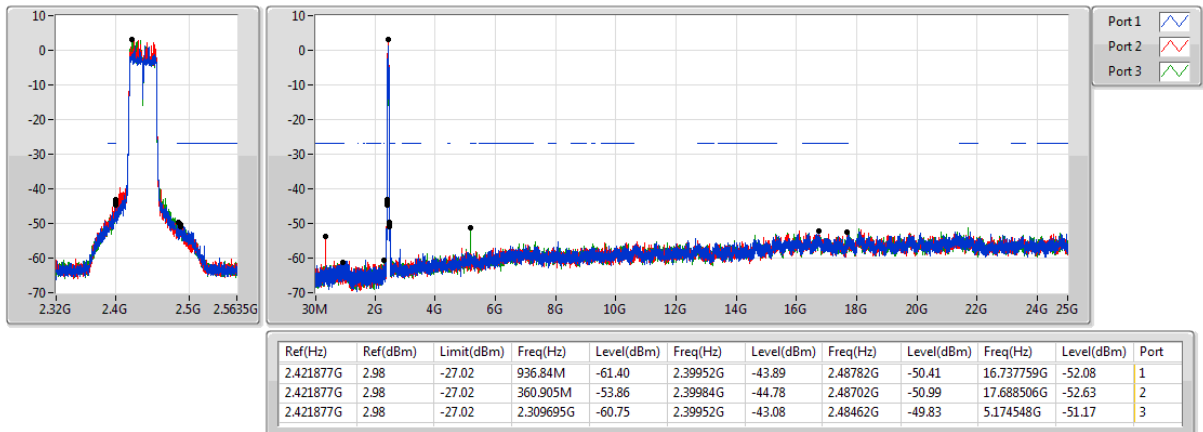
2422MHz



VHT40_Nss1,(MCS0)_3TX

CSE NdB

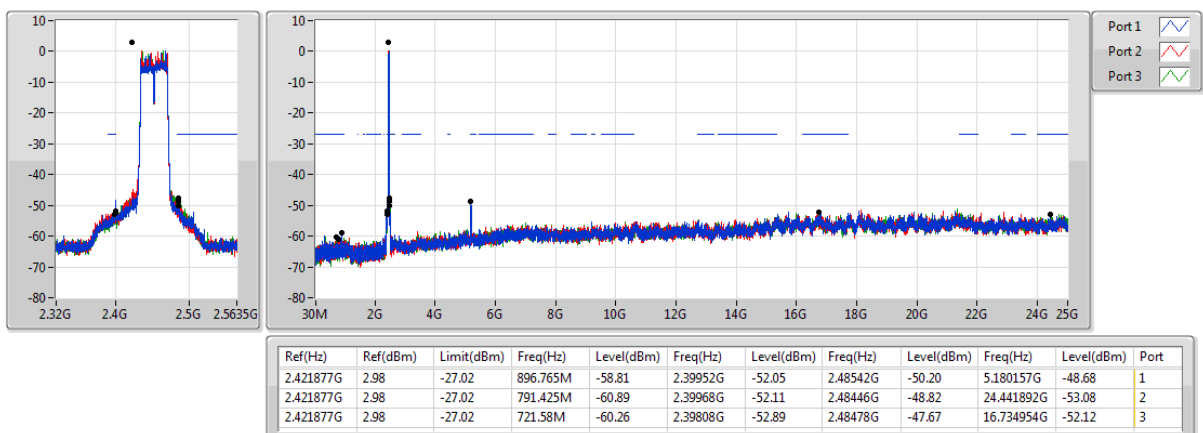
2437MHz

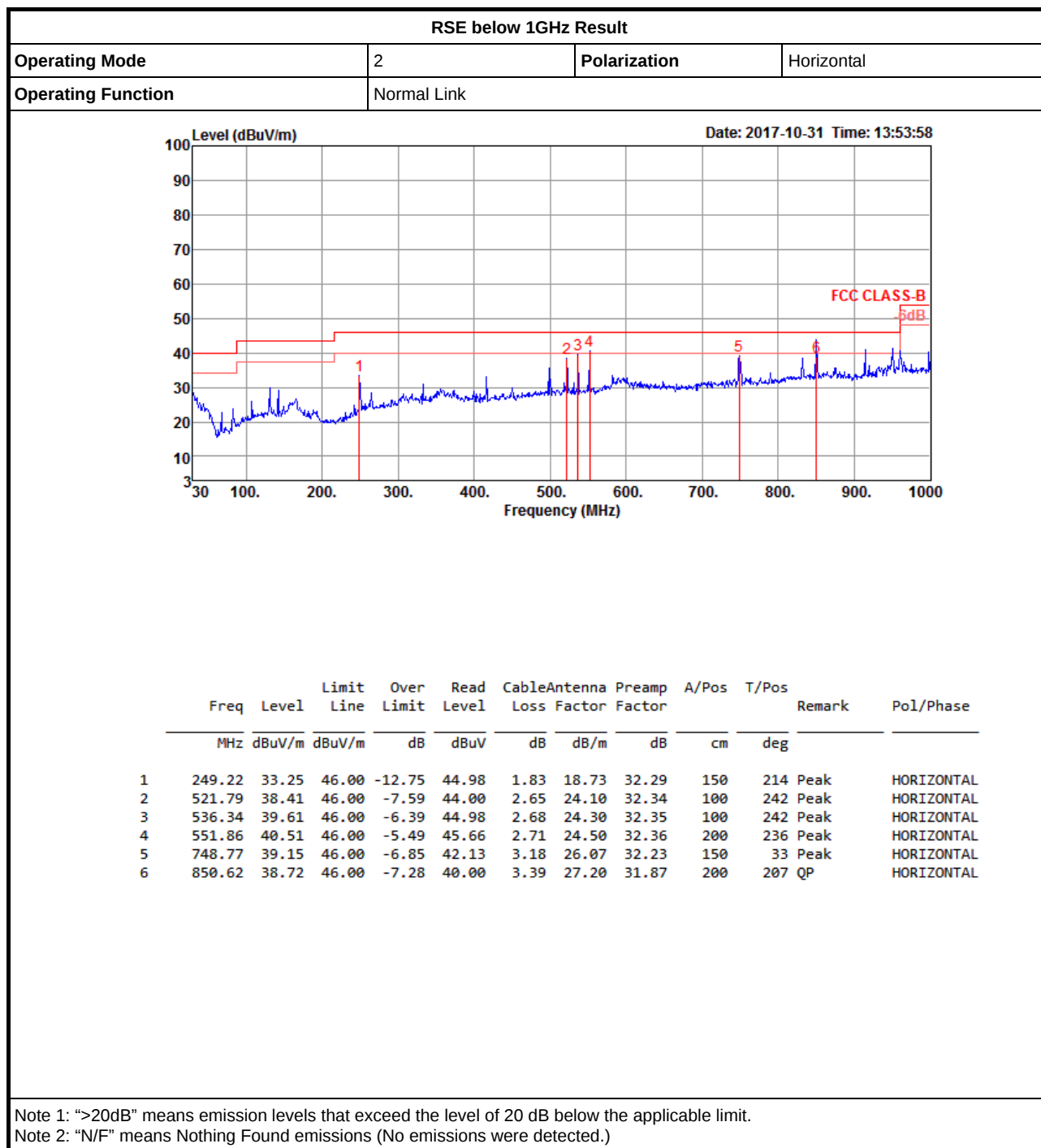


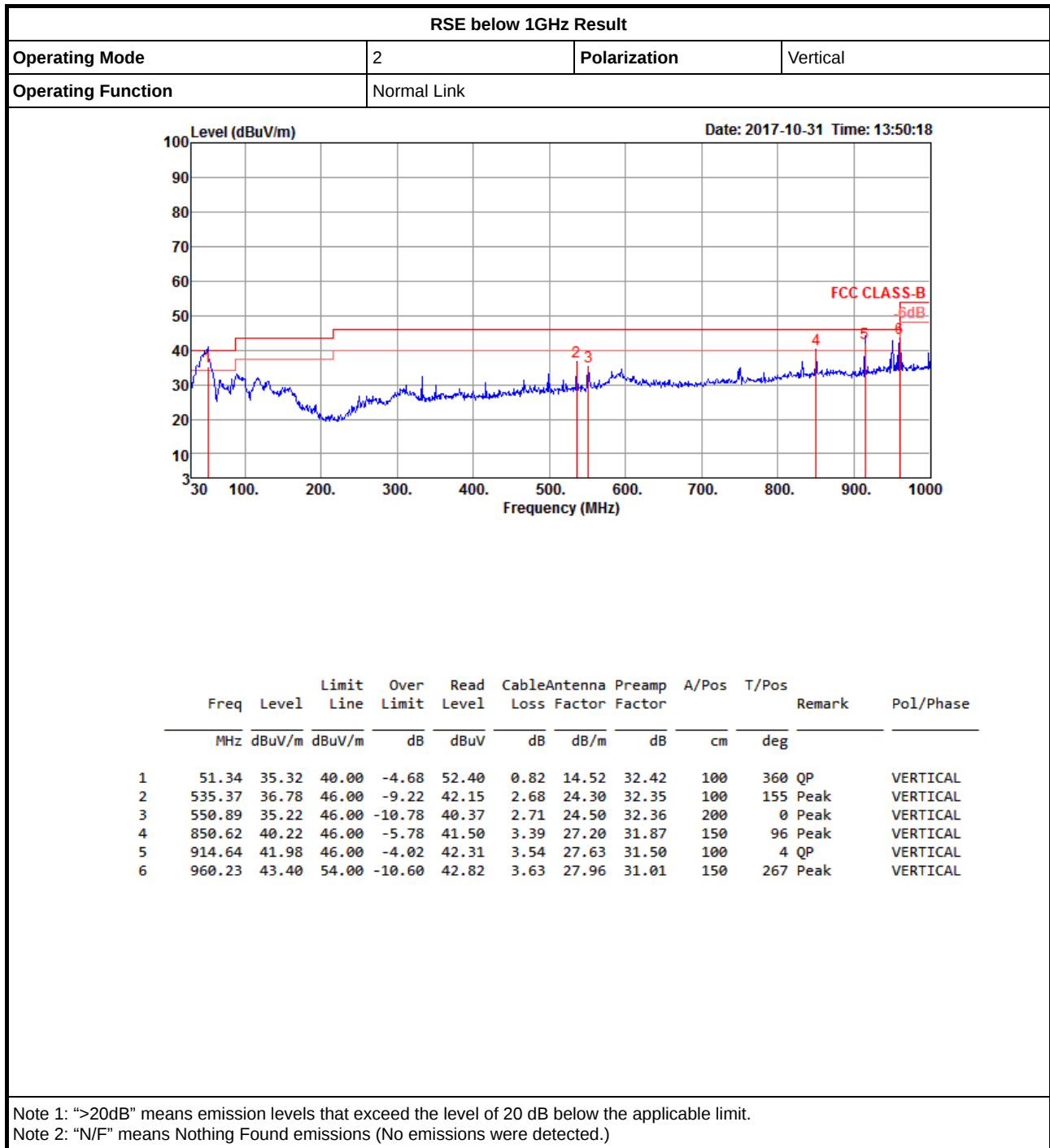
VHT40_Nss1,(MCS0)_3TX

CSE NdB

2452MHz





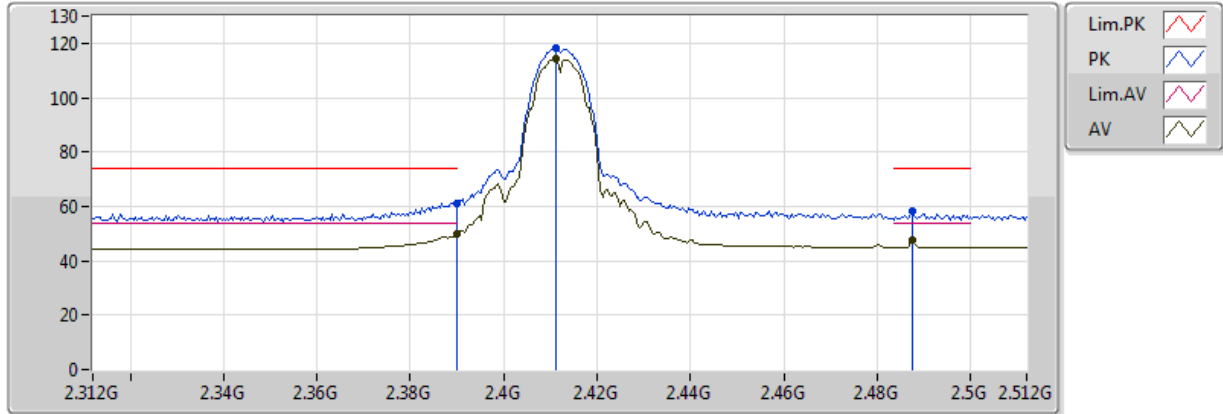


**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
11b_Nss1,(1Mbps)_3TX	Pass	AV	7.37168G	53.99	54.00	-0.01	9.06	3	Vertical	151	1.94	-

11b_Nss1,(1Mbps)_3TX

2412MHz_TX

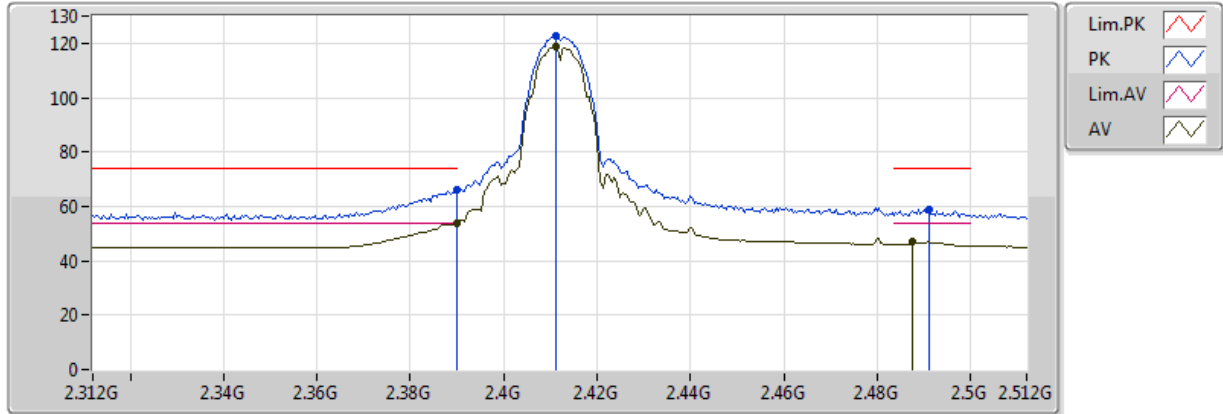


20170920
EUT Y_3TX
Setting 100
03-M-01
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.39G	49.82	54.00	-4.18	32.28	3	Vertical	353	2.80					
AV	2.4112G	114.07	Inf	-Inf	32.34	3	Vertical	353	2.80					
AV	2.4876G	47.68	54.00	-6.32	32.54	3	Vertical	353	2.80					
PK	2.39G	61.21	74.00	-12.79	32.28	3	Vertical	353	2.80					
PK	2.4112G	118.00	Inf	-Inf	32.34	3	Vertical	353	2.80					
PK	2.4876G	58.11	74.00	-15.89	32.54	3	Vertical	353	2.80					

11b_Nss1,(1Mbps)_3TX

2412MHz_TX

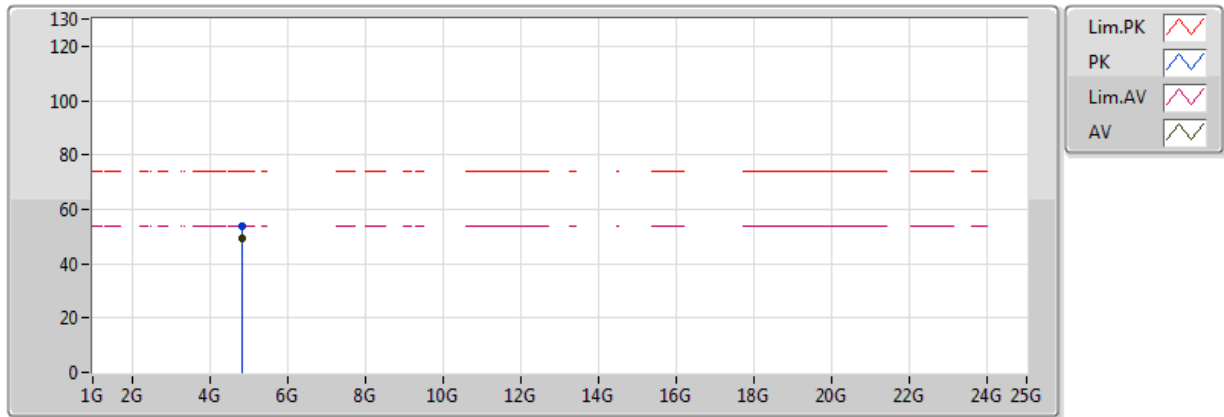


20170920
EUT Y_3TX
Setting 100
03-M-01
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.39G	53.87	54.00	-0.13	32.28	3	Horizontal	88	1.00					
AV	2.4112G	118.64	Inf	-Inf	32.34	3	Horizontal	88	1.00					
AV	2.4876G	47.24	54.00	-6.76	32.54	3	Horizontal	88	1.00					
PK	2.39G	66.31	74.00	-7.69	32.28	3	Horizontal	88	1.00					
PK	2.4112G	122.50	Inf	-Inf	32.34	3	Horizontal	88	1.00					
PK	2.4912G	59.08	74.00	-14.92	32.55	3	Horizontal	88	1.00					

11b_Nss1,(1Mbps)_3TX

2412MHz_TX

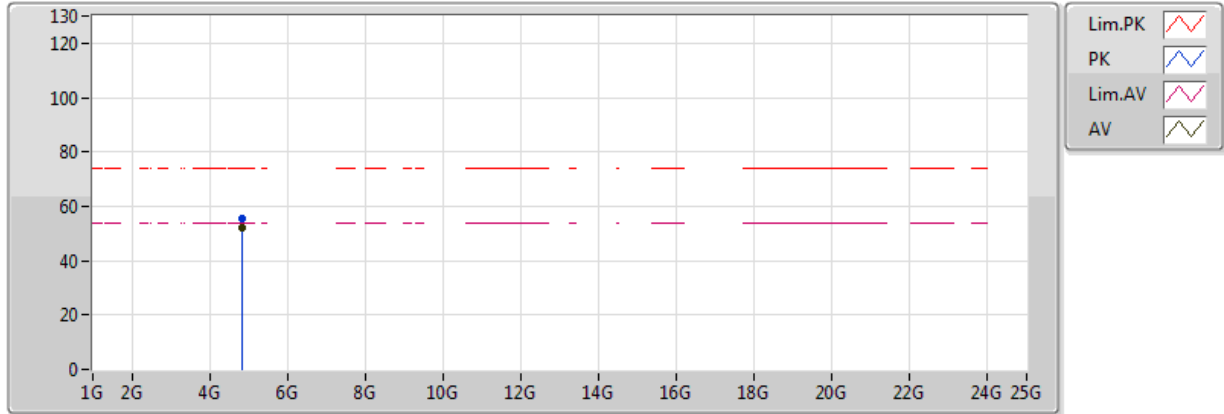


20170920
EUT Y_3TX
Setting 100
03-M-01
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.824G	49.17	54.00	-4.83	5.01	3	Vertical	167	2.94					
PK	4.824G	53.61	74.00	-20.39	5.01	3	Vertical	167	2.94					

11b_Nss1,(1Mbps)_3TX

2412MHz_TX

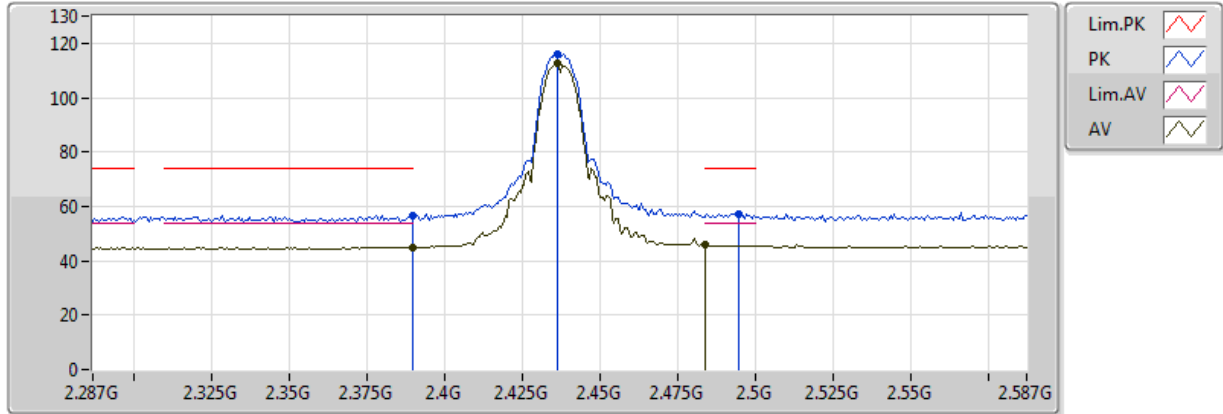


20170920
EUT Y_3TX
Setting 100
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.824G	52.06	54.00	-1.94	5.01	3	Horizontal	193	1.58					
PK	4.824G	55.28	74.00	-18.72	5.01	3	Horizontal	193	1.58					

11b_Nss1,(1Mbps)_3TX

2437MHz_TX

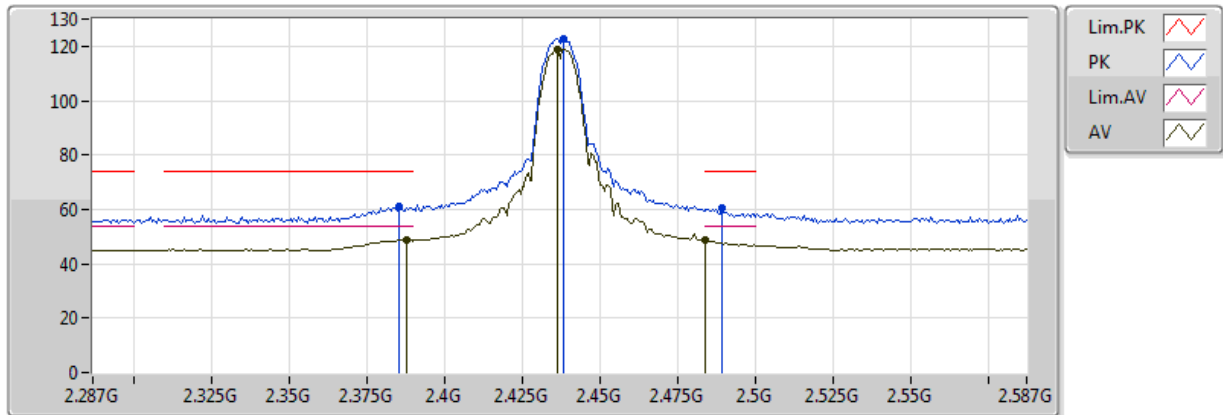


20170920
EUT Y_3TX
Setting 103
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.389998G	45.01	54.00	-8.99	32.28	3	Vertical	160	1.65					
AV	2.4364G	112.42	Inf	-Inf	32.40	3	Vertical	160	1.65					
AV	2.483502G	45.97	54.00	-8.03	32.53	3	Vertical	160	1.65					
PK	2.3896G	56.57	74.00	-17.43	32.28	3	Vertical	160	1.65					
PK	2.4364G	116.20	Inf	-Inf	32.40	3	Vertical	160	1.65					
PK	2.4946G	57.40	74.00	-16.60	32.56	3	Vertical	160	1.65					

11b_Nss1,(1Mbps)_3TX

2437MHz_TX

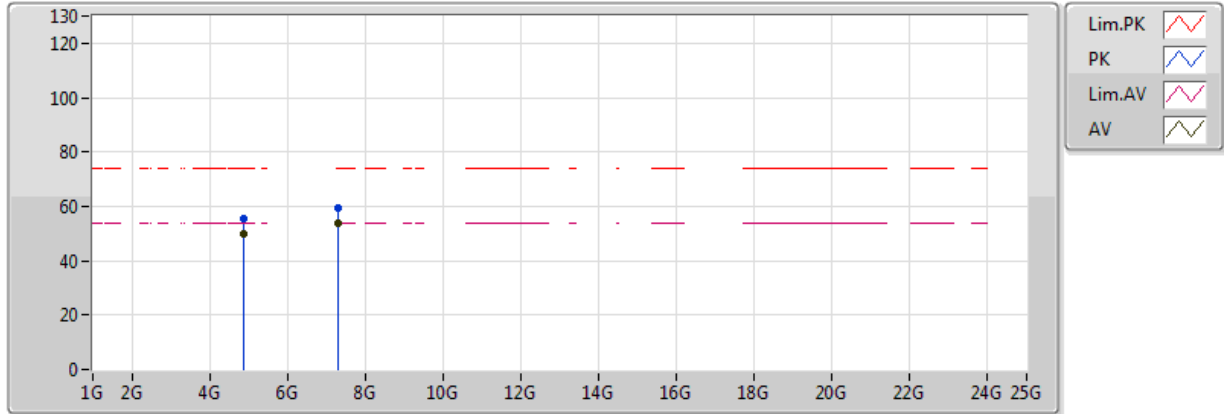


20170920
EUT Y_3TX
Setting 103
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3878G	48.70	54.00	-5.30	32.28	3	Horizontal	87	1.67					
AV	2.4364G	118.87	Inf	-Inf	32.40	3	Horizontal	87	1.67					
AV	2.483502G	48.47	54.00	-5.53	32.53	3	Horizontal	87	1.67					
PK	2.3854G	60.92	74.00	-13.08	32.27	3	Horizontal	87	1.67					
PK	2.4382G	122.74	Inf	-Inf	32.41	3	Horizontal	87	1.67					
PK	2.4892G	60.79	74.00	-13.21	32.54	3	Horizontal	87	1.67					

11b_Nss1,(1Mbps)_3TX

2437MHz_TX

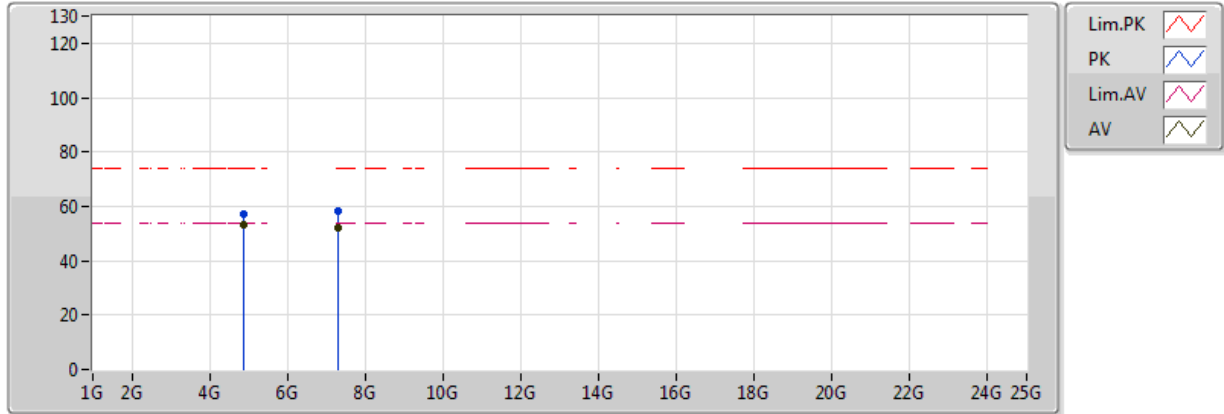


20170920
EUT_Y_3TX
Setting 103
03-M-01
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.87396G	49.75	54.00	-4.25	5.23	3	Vertical	153	1.50					
AV	7.31024G	53.60	54.00	-0.40	9.09	3	Vertical	141	1.49					
PK	4.874G	55.31	74.00	-18.69	5.23	3	Vertical	153	1.50					
PK	7.31004G	59.55	74.00	-14.45	9.09	3	Vertical	141	1.49					

11b_Nss1,(1Mbps)_3TX

2437MHz_TX

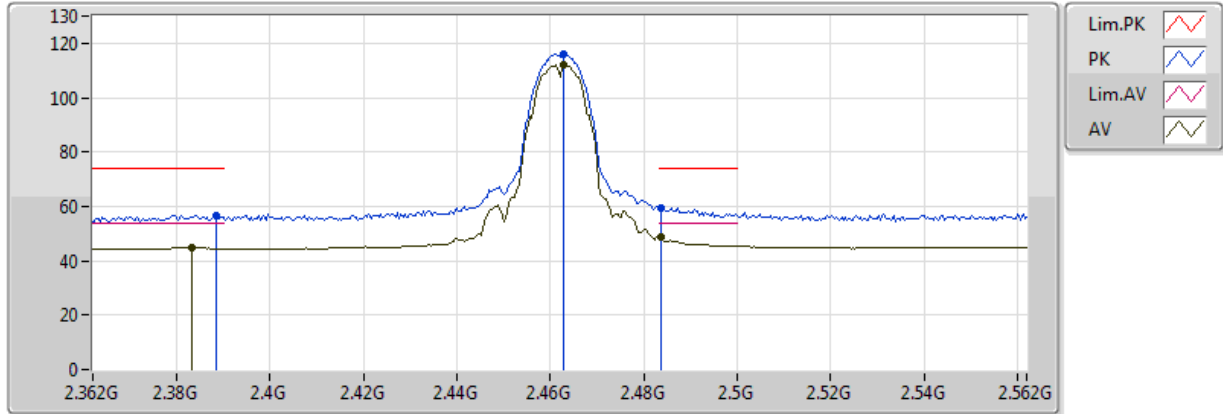


20170920
EUT_Y_3TX
Setting 103
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.874G	53.19	54.00	-0.81	5.23	3	Horizontal	193	1.57					
AV	7.31024G	52.00	54.00	-2.00	9.09	3	Horizontal	197	1.01					
PK	4.874G	57.28	74.00	-16.72	5.23	3	Horizontal	193	1.57					
PK	7.30996G	58.21	74.00	-15.79	9.09	3	Horizontal	197	1.01					

11b_Nss1,(1Mbps)_3TX

2462MHz_TX

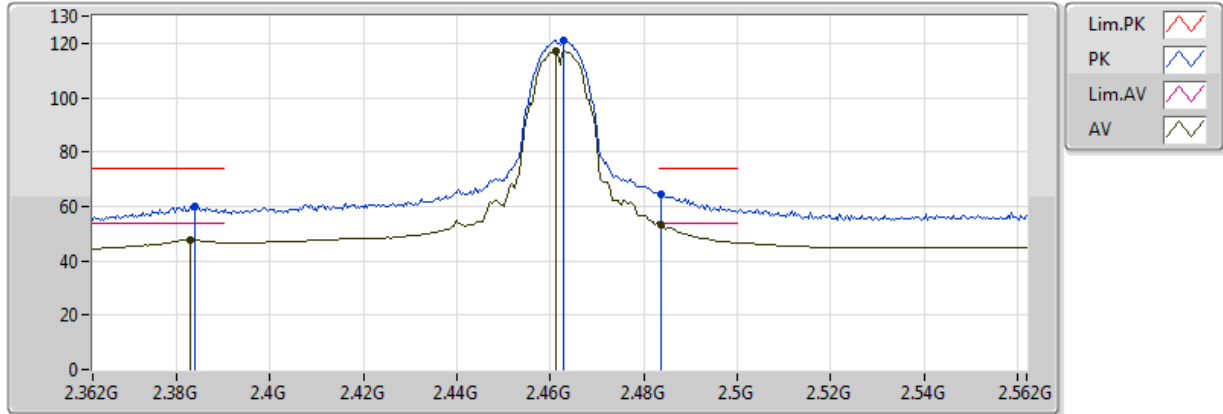


20170920
EUT Y_3TX
Setting 96
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3832G	44.87	54.00	-9.13	32.27	3	Vertical	209	1.60					
AV	2.4628G	112.04	Inf	-Inf	32.47	3	Vertical	209	1.60					
AV	2.4836G	48.79	54.00	-5.21	32.53	3	Vertical	209	1.60					
PK	2.3884G	56.79	74.00	-17.21	32.28	3	Vertical	209	1.60					
PK	2.4628G	116.13	Inf	-Inf	32.47	3	Vertical	209	1.60					
PK	2.4836G	59.43	74.00	-14.57	32.53	3	Vertical	209	1.60					

11b_Nss1,(1Mbps)_3TX

2462MHz_TX

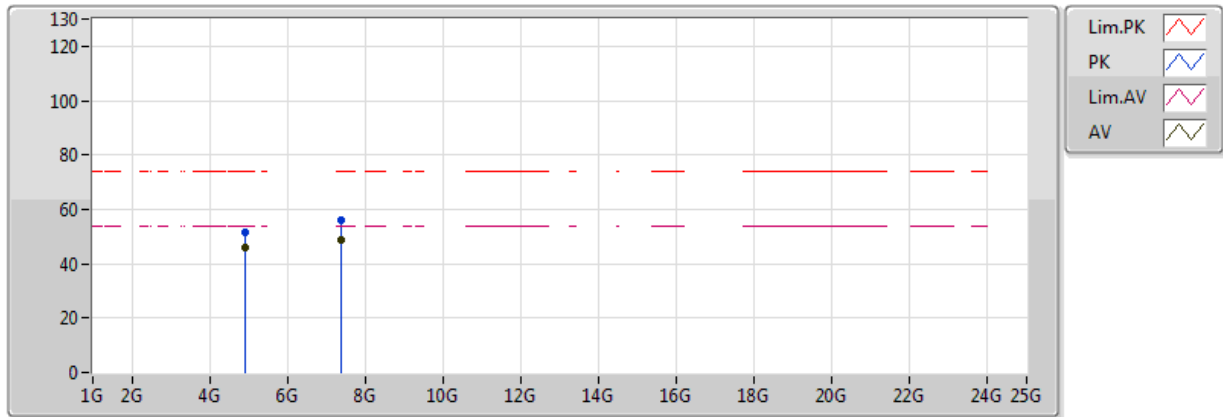


20170920
EUT Y_3TX
Setting 96
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3828G	47.69	54.00	-6.31	32.27	3	Horizontal	85	1.50					
AV	2.4612G	117.02	Inf	-Inf	32.47	3	Horizontal	85	1.50					
AV	2.4836G	53.50	54.00	-0.50	32.53	3	Horizontal	85	1.50					
PK	2.384G	60.13	74.00	-13.87	32.27	3	Horizontal	85	1.50					
PK	2.4628G	121.06	Inf	-Inf	32.47	3	Horizontal	85	1.50					
PK	2.4836G	64.66	74.00	-9.34	32.53	3	Horizontal	85	1.50					

11b_Nss1,(1Mbps)_3TX

2462MHz_TX

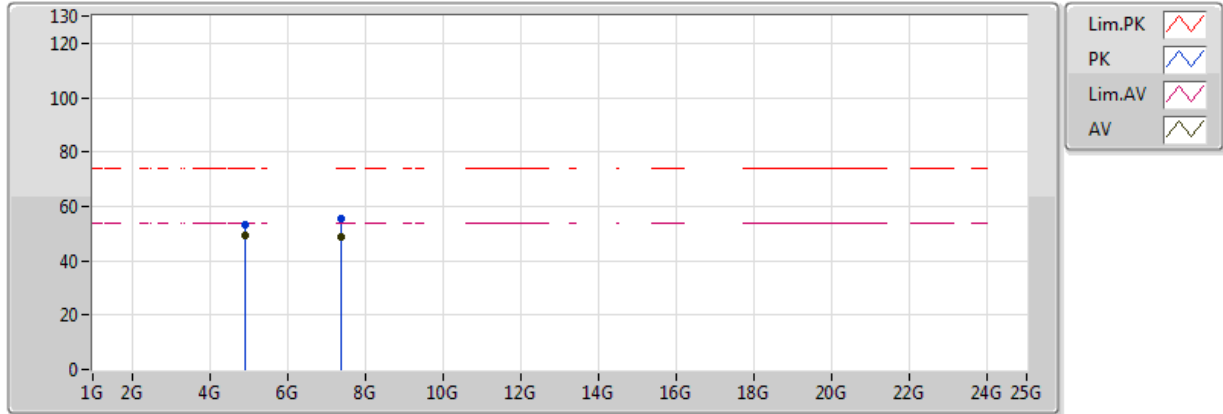


20170920
EUT Y_3TX
Setting 96
03-M-01
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.92392G	45.98	54.00	-8.02	5.45	3	Vertical	148	2.92					
AV	7.3852G	48.82	54.00	-5.18	9.06	3	Vertical	140	1.32					
PK	4.92392G	51.81	74.00	-22.19	5.45	3	Vertical	148	2.92					
PK	7.38688G	56.11	74.00	-17.89	9.06	3	Vertical	140	1.32					

11b_Nss1,(1Mbps)_3TX

2462MHz_TX

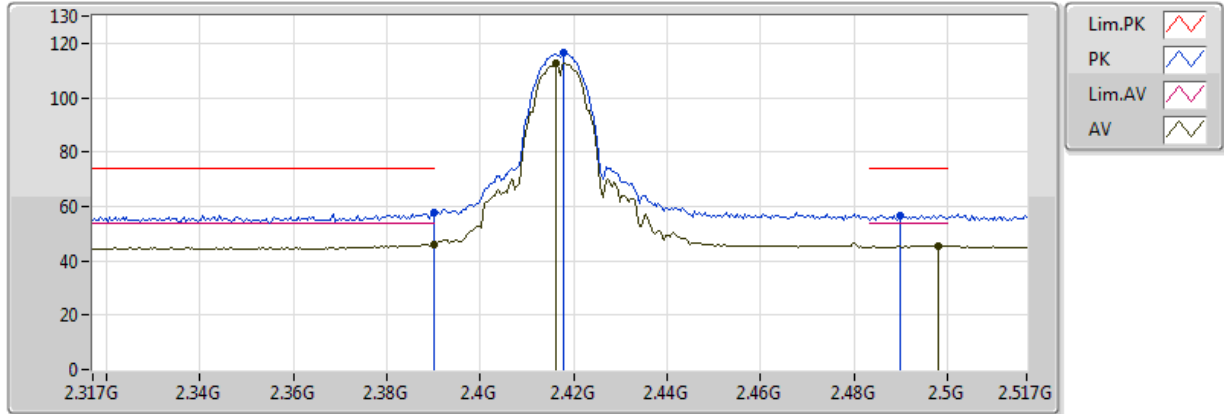


20170920
EUT Y_3TX
Setting 96
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.92396G	49.38	54.00	-4.62	5.45	3	Horizontal	194	2.25					
AV	7.38528G	48.48	54.00	-5.52	9.06	3	Horizontal	196	1.09					
PK	4.924G	53.42	74.00	-20.58	5.45	3	Horizontal	194	2.25					
PK	7.38692G	55.47	74.00	-18.53	9.06	3	Horizontal	196	1.09					

11b_Nss1,(1Mbps)_3TX

2417MHz_TX

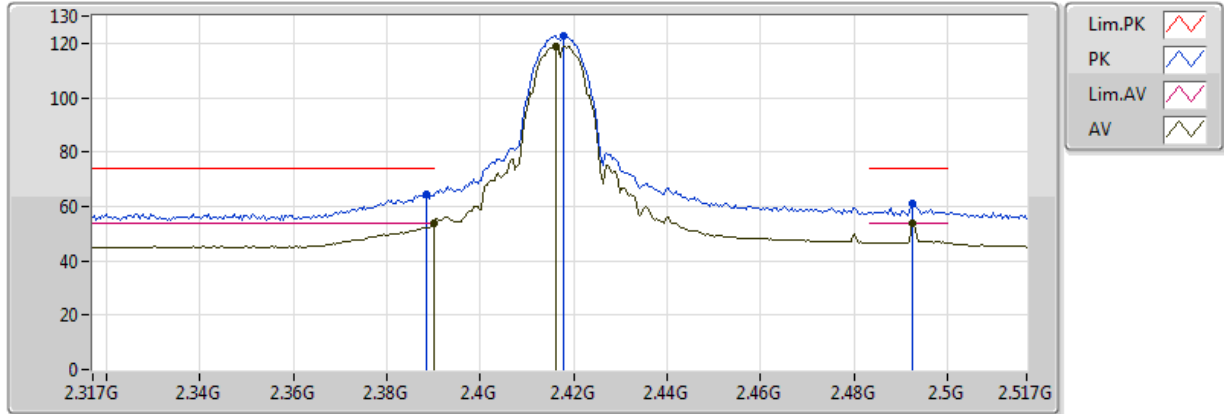


20170920
EUT Y_3TX
Setting 102
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.389998G	46.15	54.00	-7.85	32.28	3	Vertical	165	1.58					
AV	2.4162G	112.39	Inf	-Inf	32.35	3	Vertical	165	1.58					
AV	2.4982G	45.59	54.00	-8.41	32.57	3	Vertical	165	1.58					
PK	2.389998G	57.97	74.00	-16.03	32.28	3	Vertical	165	1.58					
PK	2.4178G	116.37	Inf	-Inf	32.36	3	Vertical	165	1.58					
PK	2.4898G	56.80	74.00	-17.20	32.54	3	Vertical	165	1.58					

11b_Nss1,(1Mbps)_3TX

2417MHz_TX

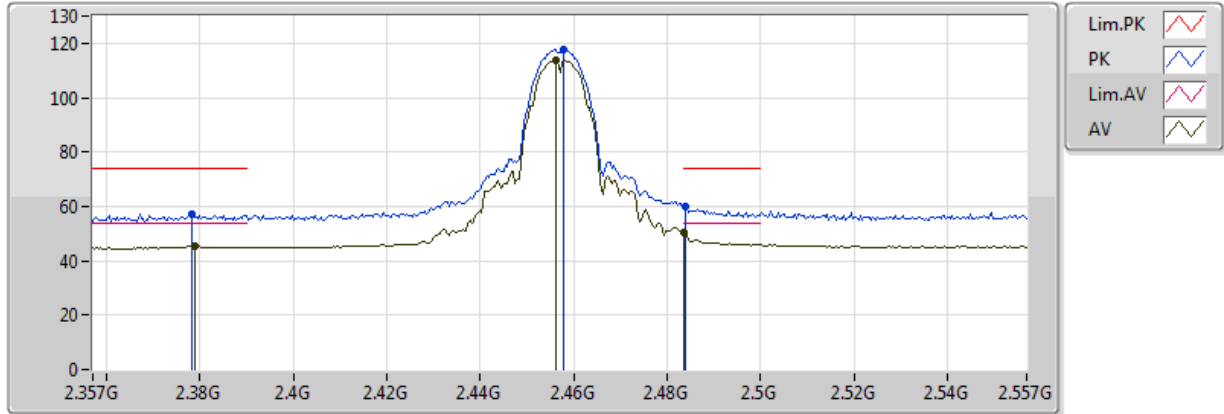


20170920
EUT Y_3TX
Setting 102
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.389998G	53.97	54.00	-0.03	32.28	3	Horizontal	92	1.50					
AV	2.4162G	119.07	Inf	-Inf	32.35	3	Horizontal	92	1.50					
AV	2.4926G	53.59	54.00	-0.41	32.55	3	Horizontal	92	1.50					
PK	2.3886G	64.46	74.00	-9.54	32.28	3	Horizontal	92	1.50					
PK	2.4178G	122.74	Inf	-Inf	32.36	3	Horizontal	92	1.50					
PK	2.4926G	61.11	74.00	-12.89	32.55	3	Horizontal	92	1.50					

11b_Nss1,(1Mbps)_3TX

2457MHz_TX

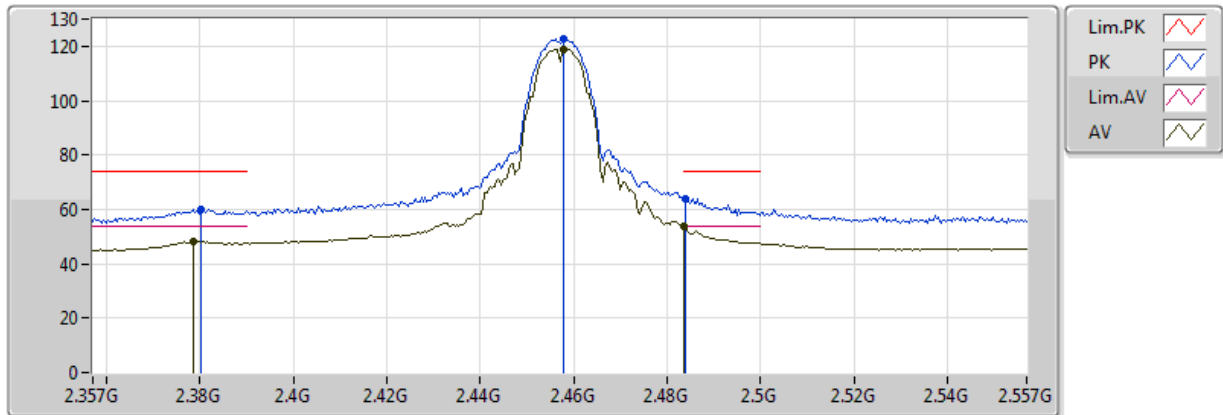


20170920
EUT Y_3TX
Setting 102
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.379G	45.23	54.00	-8.77	32.26	3	Vertical	208	1.70					
AV	2.4562G	113.72	Inf	-Inf	32.46	3	Vertical	208	1.70					
AV	2.483502G	50.50	54.00	-3.50	32.53	3	Vertical	208	1.70					
PK	2.3782G	56.97	74.00	-17.03	32.26	3	Vertical	208	1.70					
PK	2.4578G	117.70	Inf	-Inf	32.46	3	Vertical	208	1.70					
PK	2.4838G	60.18	74.00	-13.82	32.53	3	Vertical	208	1.70					

11b_Nss1,(1Mbps)_3TX

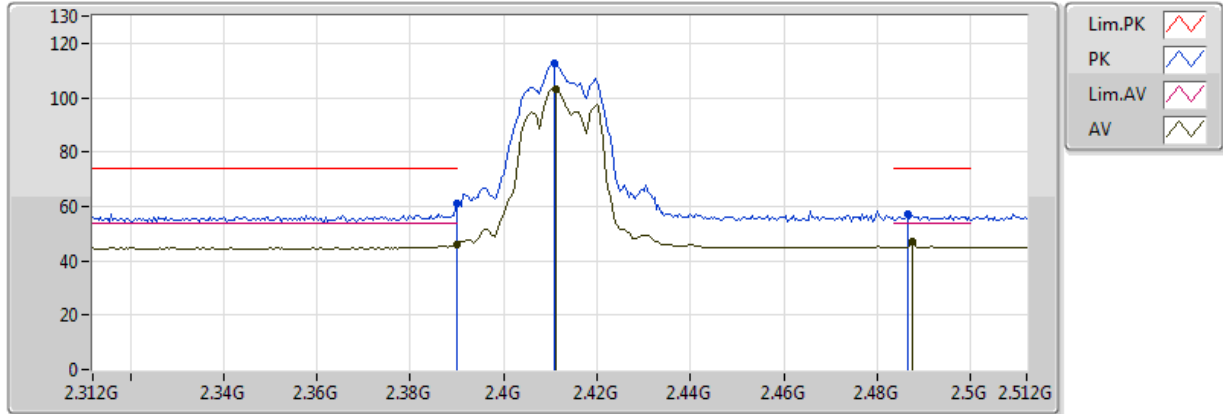
2457MHz_TX



20170920
EUT Y_3TX
Setting 102
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3786G	48.19	54.00	-5.81	32.26	3	Horizontal	85	1.54					
AV	2.4578G	118.95	Inf	-Inf	32.46	3	Horizontal	85	1.54					
AV	2.483502G	53.91	54.00	-0.09	32.53	3	Horizontal	85	1.54					
PK	2.3802G	60.12	74.00	-13.88	32.26	3	Horizontal	85	1.54					
PK	2.4578G	122.82	Inf	-Inf	32.46	3	Horizontal	85	1.54					
PK	2.4838G	64.07	74.00	-9.93	32.53	3	Horizontal	85	1.54					

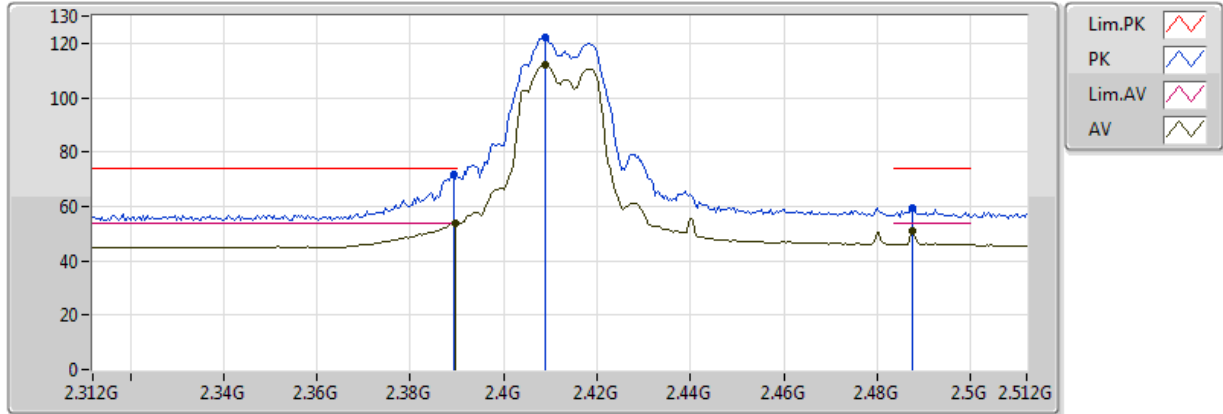
11g_Nss1,(6Mbps)_3TX 2412MHz_TX



20170920
EUT Y_3TX
Setting 77
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.39G	46.11	54.00	-7.89	32.28	3	Vertical	340	2.23					
AV	2.4112G	103.32	Inf	-Inf	32.34	3	Vertical	340	2.23					
AV	2.4876G	47.06	54.00	-6.94	32.54	3	Vertical	340	2.23					
PK	2.39G	60.86	74.00	-13.14	32.28	3	Vertical	340	2.23					
PK	2.4108G	112.69	Inf	-Inf	32.34	3	Vertical	340	2.23					
PK	2.4864G	57.05	74.00	-16.95	32.53	3	Vertical	340	2.23					

11g_Nss1,(6Mbps)_3TX 2412MHz_TX

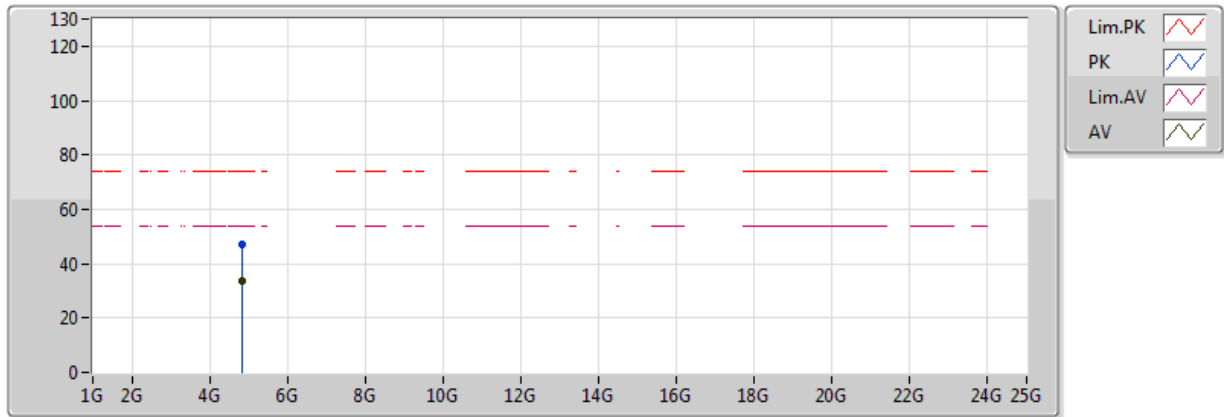


20170920
EUT Y_3TX
Setting 77
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3896G	53.90	54.00	-0.10	32.28	3	Horizontal	319	2.11					
AV	2.4088G	112.27	Inf	-Inf	32.33	3	Horizontal	319	2.11					
AV	2.4876G	51.24	54.00	-2.76	32.54	3	Horizontal	319	2.11					
PK	2.3892G	71.78	74.00	-2.22	32.28	3	Horizontal	319	2.11					
PK	2.4088G	122.02	Inf	-Inf	32.33	3	Horizontal	319	2.11					
PK	2.4876G	59.47	74.00	-14.53	32.54	3	Horizontal	319	2.11					

11g_Nss1,(6Mbps)_3TX

2412MHz_TX

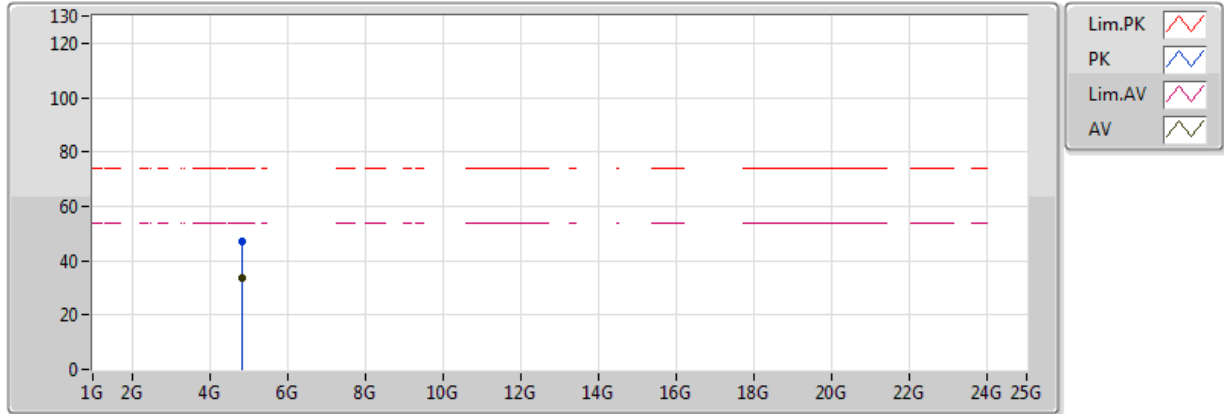


20170920
EUT_Y_3TX
Setting 77
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.82302G	33.61	54.00	-20.39	5.00	3	Vertical	276	1.49					
PK	4.82042G	47.32	74.00	-26.68	4.99	3	Vertical	276	1.49					

11g_Nss1,(6Mbps)_3TX

2412MHz_TX

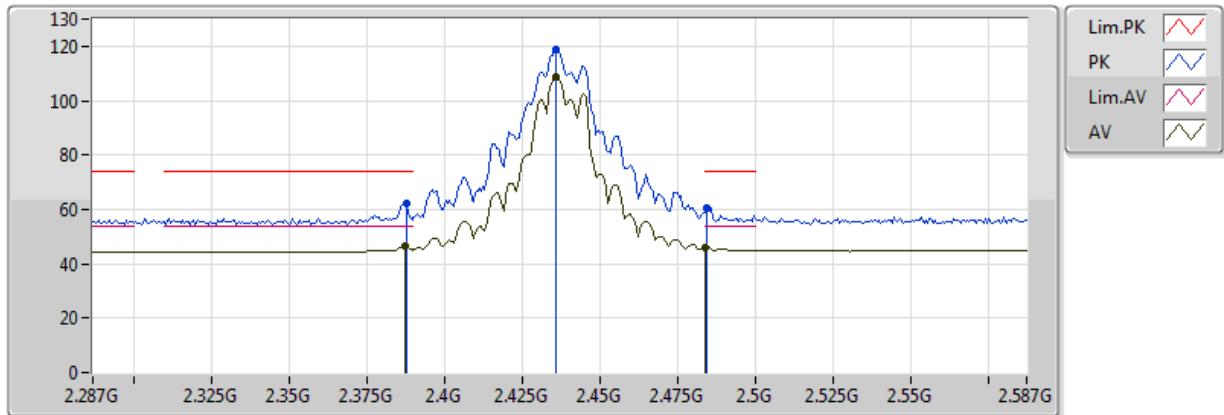


20170920
EUT_Y_3TX
Setting 77
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.8271G	33.64	54.00	-20.36	5.02	3	Horizontal	280	2.21					
PK	4.8212G	47.32	74.00	-26.68	4.99	3	Horizontal	280	2.21					

11g_Nss1,(6Mbps)_3TX

2437MHz_TX

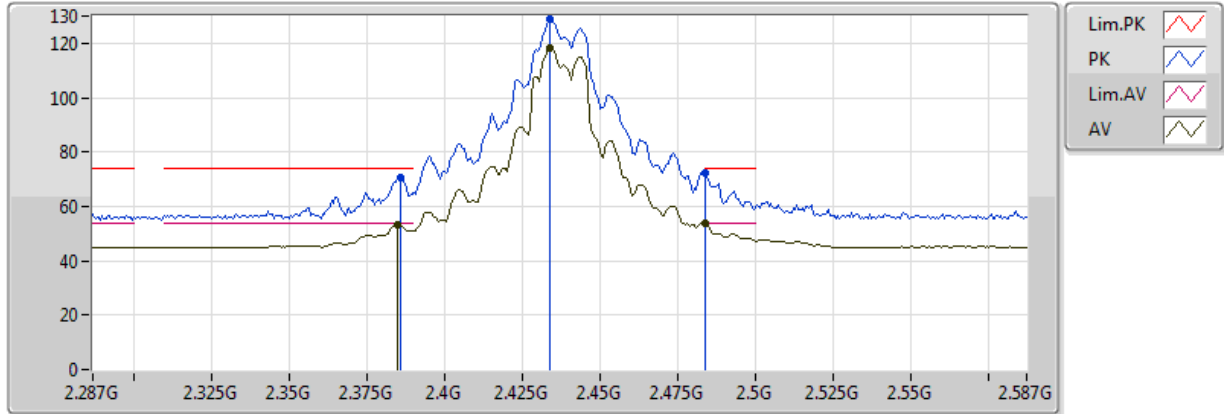


20170920
EUT Y_3TX
Setting 106
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3872G	46.32	54.00	-7.68	32.28	3	Vertical	343	1.87					
AV	2.4358G	108.92	Inf	-Inf	32.40	3	Vertical	343	1.87					
AV	2.4838G	45.88	54.00	-8.12	32.53	3	Vertical	343	1.87					
PK	2.3878G	62.27	74.00	-11.73	32.28	3	Vertical	343	1.87					
PK	2.4358G	119.05	Inf	-Inf	32.40	3	Vertical	343	1.87					
PK	2.4844G	60.71	74.00	-13.29	32.53	3	Vertical	343	1.87					

11g_Nss1,(6Mbps)_3TX

2437MHz_TX

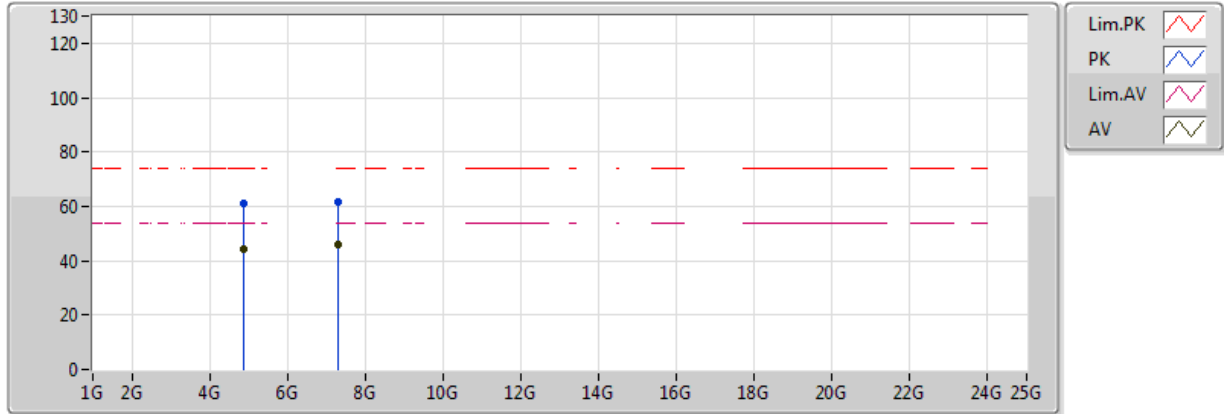


20170920
EUT Y_3TX
Setting 106
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3848G	53.14	54.00	-0.86	32.27	3	Horizontal	318	2.32					
AV	2.434G	118.03	Inf	-Inf	32.40	3	Horizontal	318	2.32					
AV	2.483502G	53.74	54.00	-0.26	32.53	3	Horizontal	318	2.32					
PK	2.386G	70.59	74.00	-3.41	32.27	3	Horizontal	318	2.32					
PK	2.434G	128.64	Inf	-Inf	32.40	3	Horizontal	318	2.32					
PK	2.483502G	72.30	74.00	-1.70	32.53	3	Horizontal	318	2.32					

11g_Nss1,(6Mbps)_3TX

2437MHz_TX

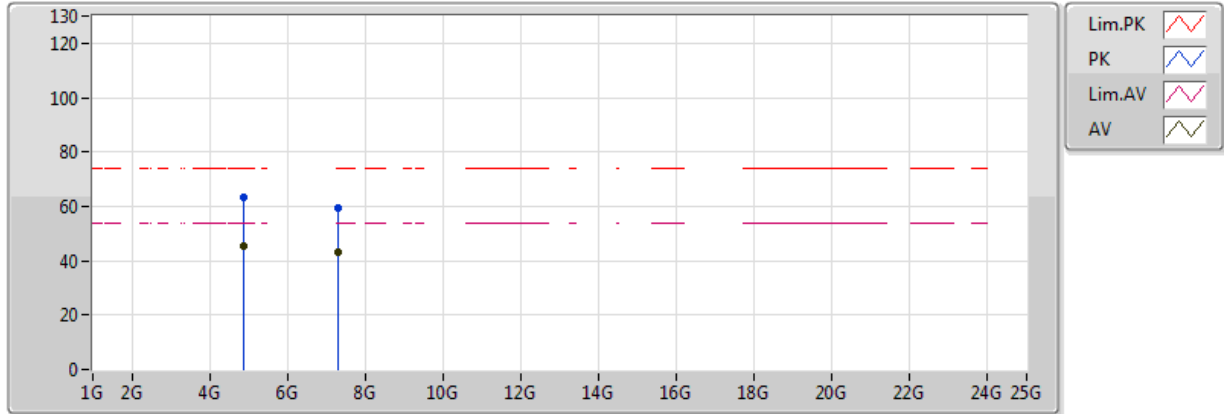


20170920
EUT_Y_3TX
Setting 106
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.8703G	44.19	54.00	-9.81	5.21	3	Vertical	182	1.73					
AV	7.3126G	46.10	54.00	-7.90	9.08	3	Vertical	159	2.04					
PK	4.8721G	60.97	74.00	-13.03	5.22	3	Vertical	182	1.73					
PK	7.3124G	61.58	74.00	-12.42	9.09	3	Vertical	159	2.04					

11g_Nss1,(6Mbps)_3TX

2437MHz_TX

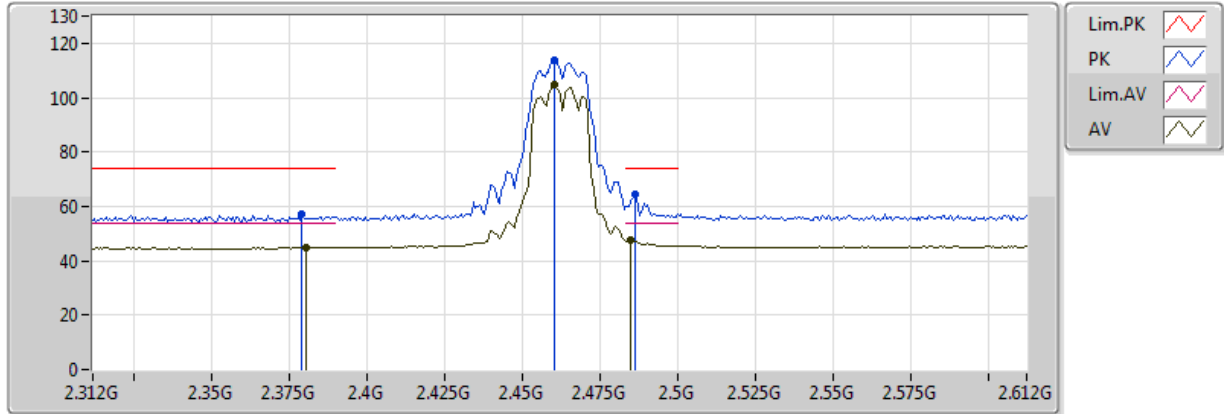


20170920
EUT_Y_3TX
Setting 106
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.8723G	45.42	54.00	-8.58	5.22	3	Horizontal	193	2.45					
AV	7.31396G	43.33	54.00	-10.67	9.08	3	Horizontal	156	1.64					
PK	4.8724G	63.37	74.00	-10.63	5.22	3	Horizontal	193	2.45					
PK	7.31396G	59.23	74.00	-14.77	9.08	3	Horizontal	156	1.64					

11g_Nss1,(6Mbps)_3TX

2462MHz_TX

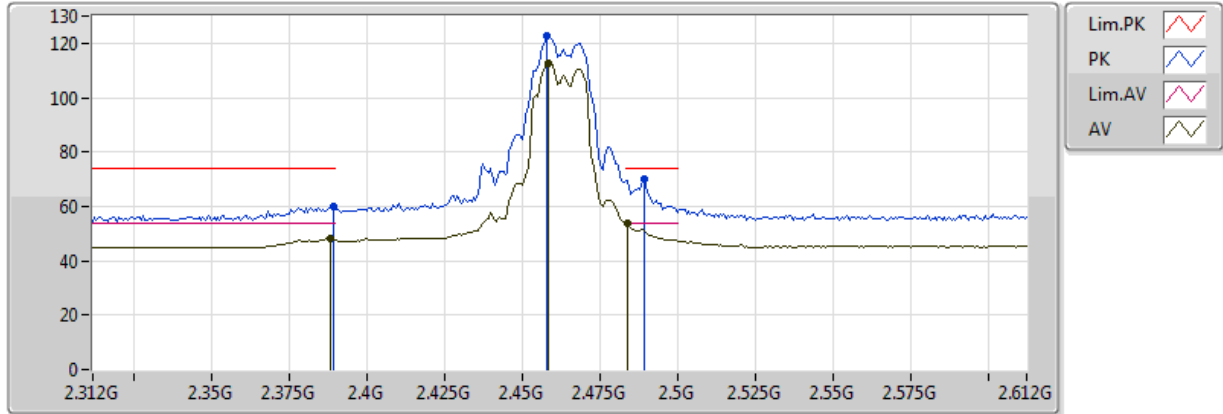


20170920
EUT Y_3TX
Setting 80
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3804G	44.88	54.00	-9.12	32.26	3	Vertical	167	2.72					
AV	2.4602G	104.63	Inf	-Inf	32.47	3	Vertical	167	2.72					
AV	2.4848G	47.39	54.00	-6.61	32.53	3	Vertical	167	2.72					
PK	2.3792G	57.22	74.00	-16.78	32.26	3	Vertical	167	2.72					
PK	2.4602G	113.90	Inf	-Inf	32.47	3	Vertical	167	2.72					
PK	2.486G	64.17	74.00	-9.83	32.53	3	Vertical	167	2.72					

11g_Nss1,(6Mbps)_3TX

2462MHz_TX

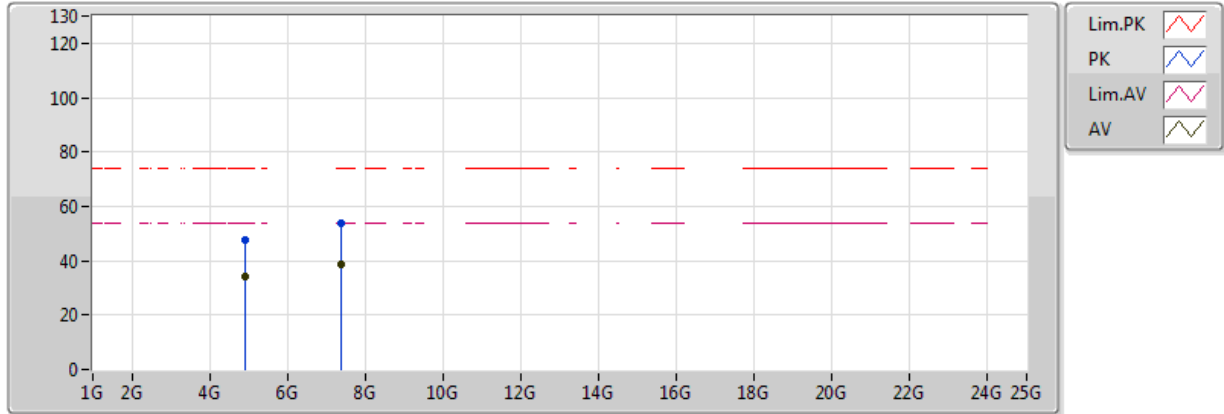


20170920
EUT Y_3TX
Setting 80
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3882G	48.25	54.00	-5.75	32.28	3	Horizontal	319	2.00					
AV	2.4584G	112.70	Inf	-Inf	32.46	3	Horizontal	319	2.00					
AV	2.4836G	53.56	54.00	-0.44	32.53	3	Horizontal	319	2.00					
PK	2.3894G	60.06	74.00	-13.94	32.28	3	Horizontal	319	2.00					
PK	2.4578G	122.52	Inf	-Inf	32.46	3	Horizontal	319	2.00					
PK	2.489G	69.92	74.00	-4.08	32.54	3	Horizontal	319	2.00					

11g_Nss1,(6Mbps)_3TX

2462MHz_TX

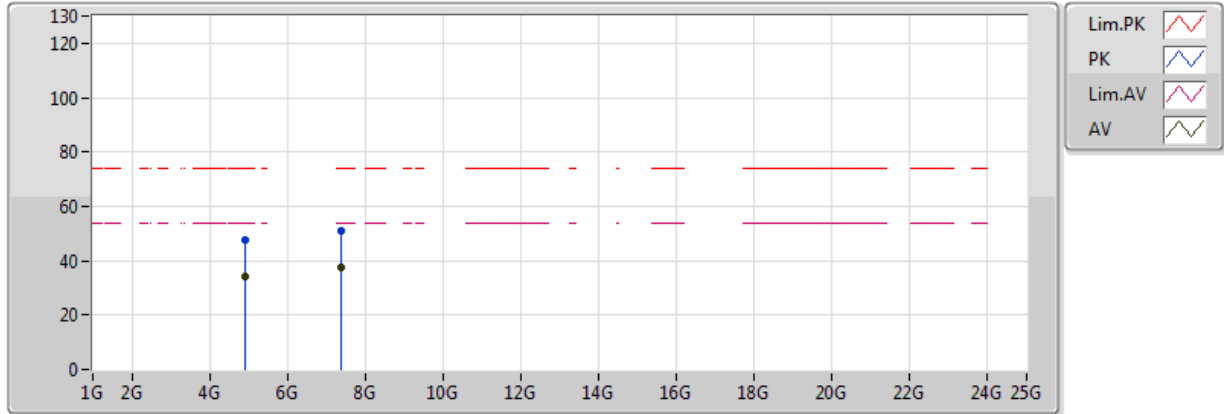


20170920
EUT_Y_3TX
Setting 80
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.92294G	34.28	54.00	-19.72	5.44	3	Vertical	269	2.01					
AV	7.38764G	38.81	54.00	-15.19	9.05	3	Vertical	160	1.92					
PK	4.92416G	47.79	74.00	-26.21	5.45	3	Vertical	269	2.01					
PK	7.38768G	53.56	74.00	-20.44	9.05	3	Vertical	160	1.92					

11g_Nss1,(6Mbps)_3TX

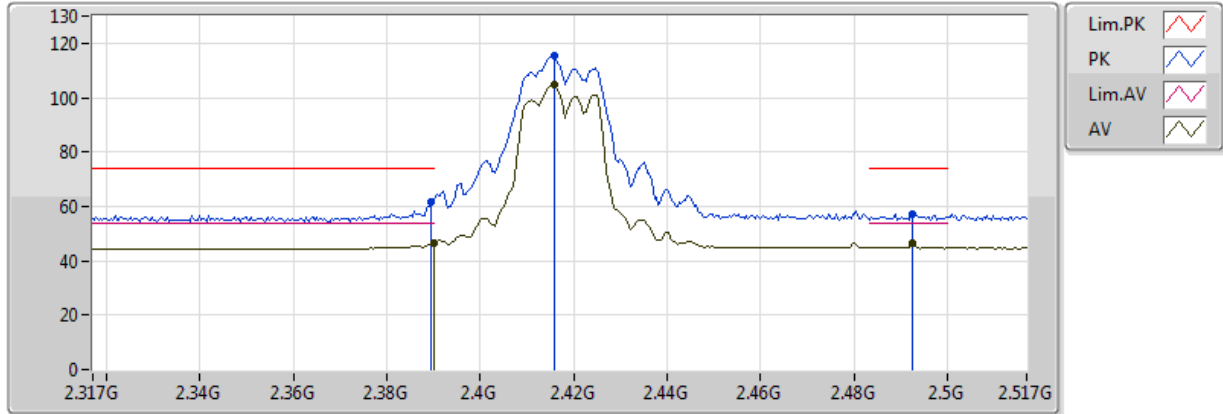
2462MHz_TX



20170920
EUT_Y_3TX
Setting 80
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.92078G	34.19	54.00	-19.81	5.43	3	Horizontal	23	1.79					
AV	7.38792G	37.55	54.00	-16.45	9.05	3	Horizontal	157	1.05					
PK	4.92312G	47.69	74.00	-26.31	5.44	3	Horizontal	23	1.79					
PK	7.38764G	51.01	74.00	-22.99	9.05	3	Horizontal	157	1.05					

11g_Nss1,(6Mbps)_3TX 2417MHz_TX

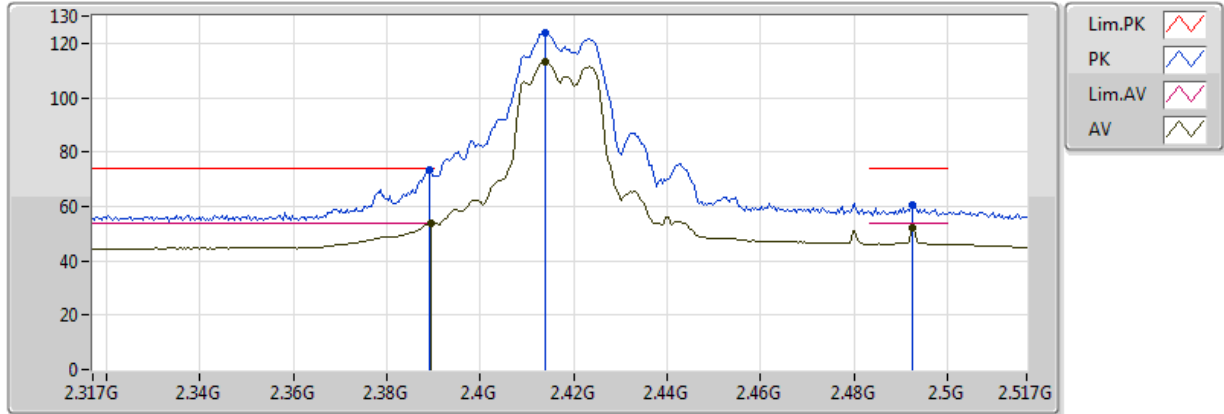


20170920
EUT Y_3TX
Setting 87
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)						
AV	2.389998G	46.70	54.00	-7.30	32.28	3	Vertical	155	2.99						
AV	2.4158G	104.68	Inf	-Inf	32.35	3	Vertical	155	2.99						
AV	2.4926G	46.70	54.00	-7.30	32.55	3	Vertical	155	2.99						
PK	2.3894G	61.78	74.00	-12.22	32.28	3	Vertical	155	2.99						
PK	2.4158G	115.28	Inf	-Inf	32.35	3	Vertical	155	2.99						
PK	2.4926G	57.15	74.00	-16.85	32.55	3	Vertical	155	2.99						

11g_Nss1,(6Mbps)_3TX

2417MHz_TX

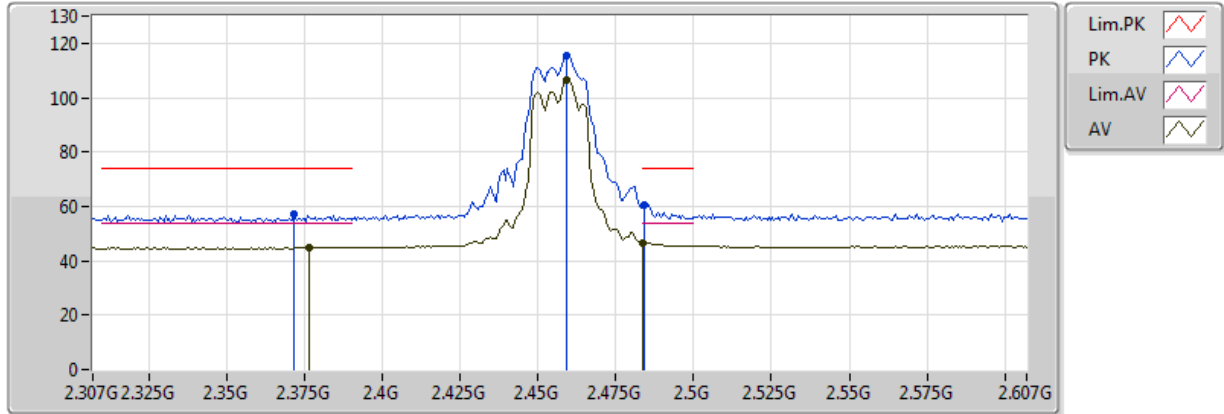


20170920
EUT Y_3TX
Setting 87
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3894G	53.85	54.00	-0.15	32.28	3	Horizontal	315	2.14					
AV	2.4138G	113.24	Inf	-Inf	32.35	3	Horizontal	315	2.14					
AV	2.4926G	52.15	54.00	-1.85	32.55	3	Horizontal	315	2.14					
PK	2.389G	73.14	74.00	-0.86	32.28	3	Horizontal	315	2.14					
PK	2.4138G	123.93	Inf	-Inf	32.35	3	Horizontal	315	2.14					
PK	2.4926G	60.75	74.00	-13.25	32.55	3	Horizontal	315	2.14					

11g_Nss1,(6Mbps)_3TX

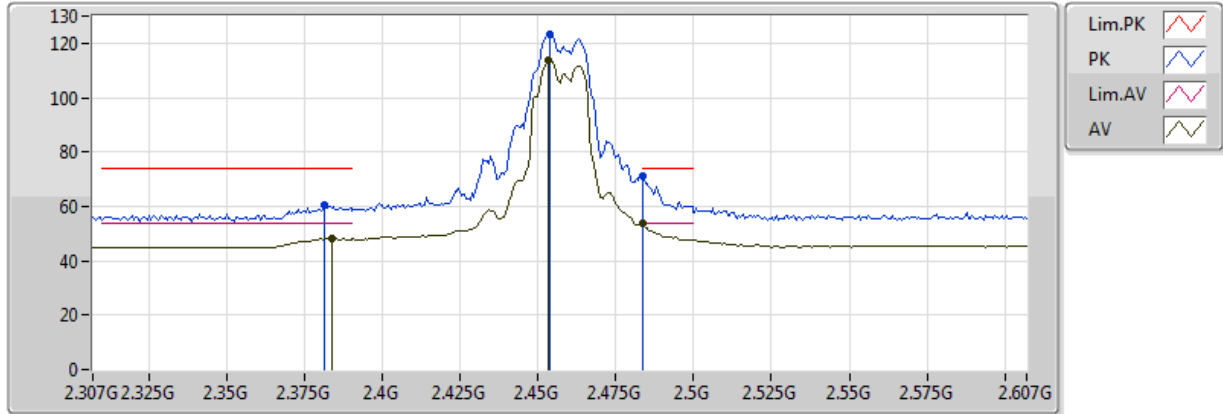
2457MHz_TX



20170920
EUT Y_3TX
Setting 84
03-M-01
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.3766G	44.99	54.00	-9.01	32.25	3	Vertical	166	2.36					
AV	2.4594G	106.21	Inf	-Inf	32.46	3	Vertical	166	2.36					
AV	2.483502G	46.69	54.00	-7.31	32.53	3	Vertical	166	2.36					
PK	2.3718G	57.19	74.00	-16.81	32.24	3	Vertical	166	2.36					
PK	2.4594G	115.70	Inf	-Inf	32.46	3	Vertical	166	2.36					
PK	2.484G	60.78	74.00	-13.22	32.53	3	Vertical	166	2.36					

11g_Nss1,(6Mbps)_3TX 2457MHz_TX

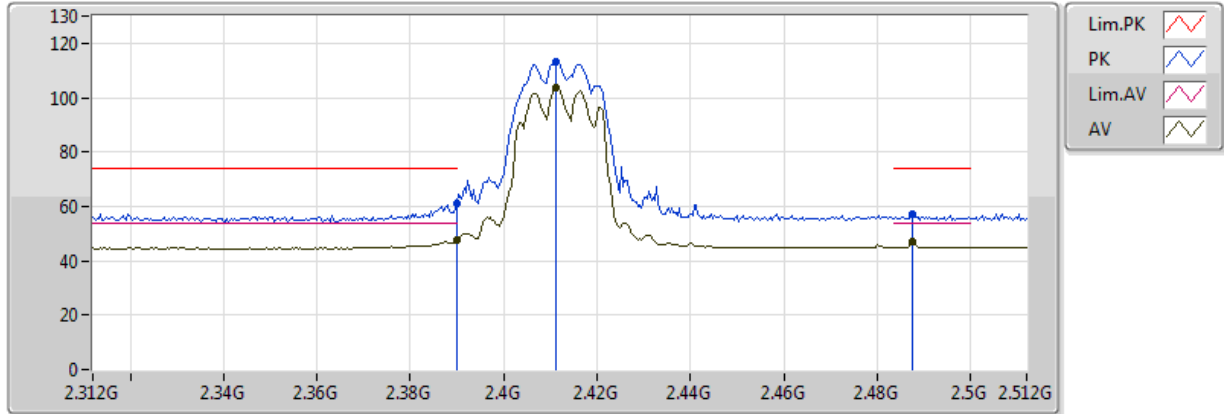


20170920
EUT Y_3TX
Setting 84
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3838G	48.30	54.00	-5.70	32.27	3	Horizontal	317	2.00					
AV	2.4534G	113.85	Inf	-Inf	32.45	3	Horizontal	317	2.00					
AV	2.483502G	53.56	54.00	-0.44	32.53	3	Horizontal	317	2.00					
PK	2.3814G	60.37	74.00	-13.63	32.26	3	Horizontal	317	2.00					
PK	2.454G	123.51	Inf	-Inf	32.45	3	Horizontal	317	2.00					
PK	2.483502G	71.27	74.00	-2.73	32.53	3	Horizontal	317	2.00					

VHT20_Nss1,(MCS0)_3TX

2412MHz_TX

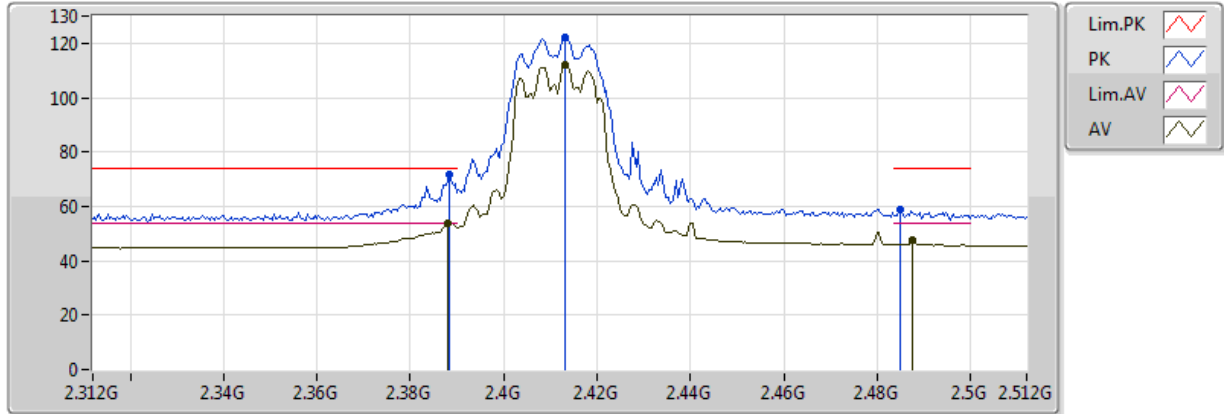


20170920
EUT Y_3TX
Setting 75
03-M-01
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.39G	47.56	54.00	-6.44	32.28	3	Vertical	348	2.86					
AV	2.4112G	103.81	Inf	-Inf	32.34	3	Vertical	348	2.86					
AV	2.4876G	47.27	54.00	-6.73	32.54	3	Vertical	348	2.86					
PK	2.39G	61.06	74.00	-12.94	32.28	3	Vertical	348	2.86					
PK	2.4112G	113.35	Inf	-Inf	32.34	3	Vertical	348	2.86					
PK	2.4876G	57.43	74.00	-16.57	32.54	3	Vertical	348	2.86					

VHT20_Nss1,(MCS0)_3TX

2412MHz_TX

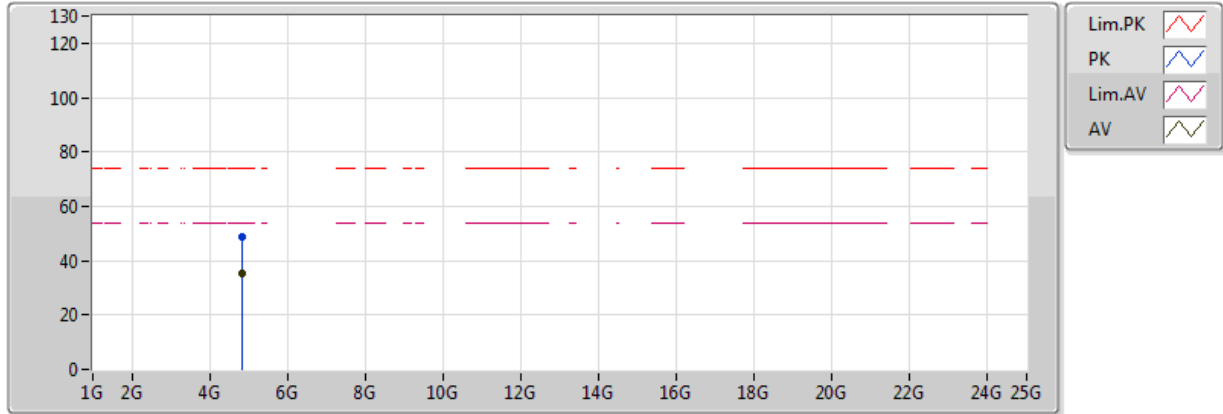


20170920
EUT Y_3TX
Setting 75
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.388G	53.63	54.00	-0.37	32.28	3	Horizontal	316	1.87					
AV	2.4132G	112.00	Inf	-Inf	32.34	3	Horizontal	316	1.87					
AV	2.4876G	47.80	54.00	-6.20	32.54	3	Horizontal	316	1.87					
PK	2.3884G	71.70	74.00	-2.30	32.28	3	Horizontal	316	1.87					
PK	2.4132G	122.28	Inf	-Inf	32.34	3	Horizontal	316	1.87					
PK	2.4848G	58.72	74.00	-15.28	32.53	3	Horizontal	316	1.87					

VHT20_Nss1,(MCS0)_3TX

2412MHz_TX

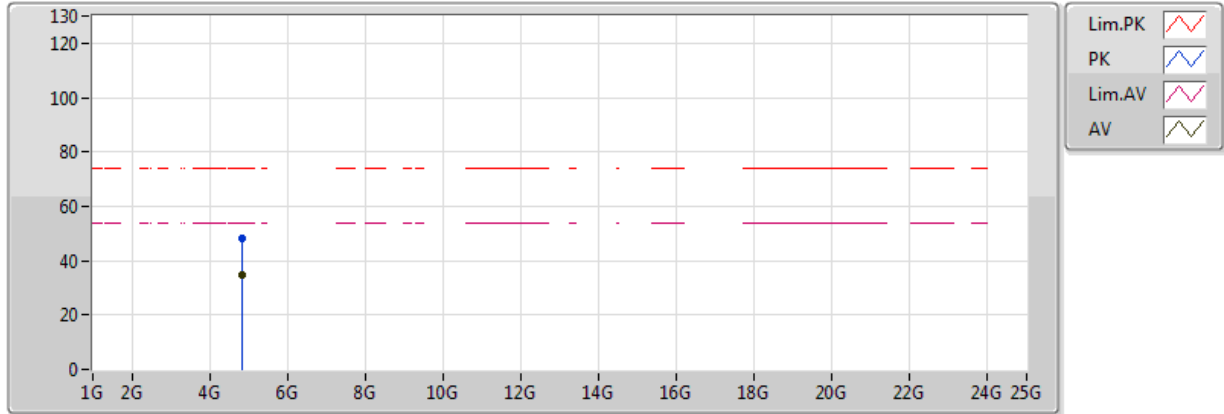


20170920
EUT_Y_3TX
Setting 75
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.82308G	35.29	54.00	-18.71	5.00	3	Vertical	175	1.74					
PK	4.8274G	48.78	74.00	-25.22	5.02	3	Vertical	175	1.74					

VHT20_Nss1,(MCS0)_3TX

2412MHz_TX

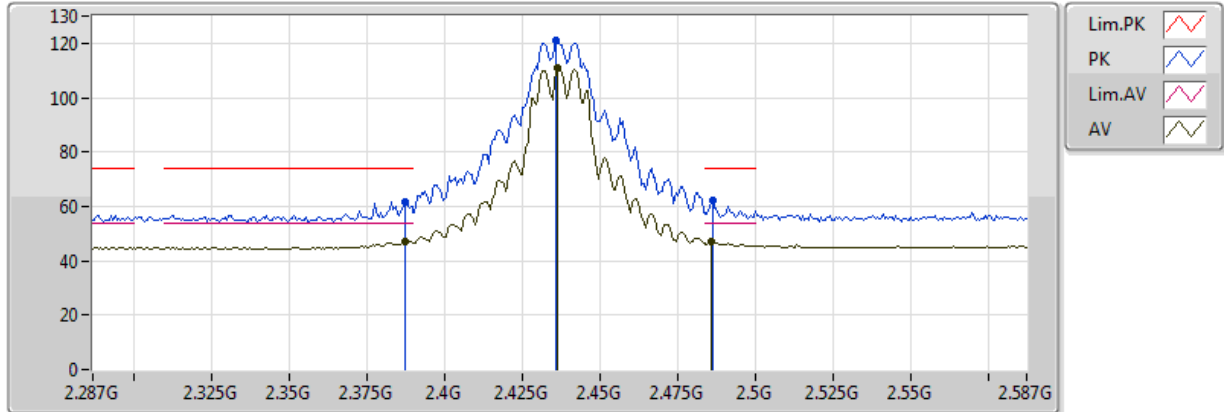


20170920
EUT_Y_3TX
Setting 75
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.8262G	34.62	54.00	-19.38	5.02	3	Horizontal	196	1.42					
PK	4.82068G	48.02	74.00	-25.98	4.99	3	Horizontal	196	1.42					

VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

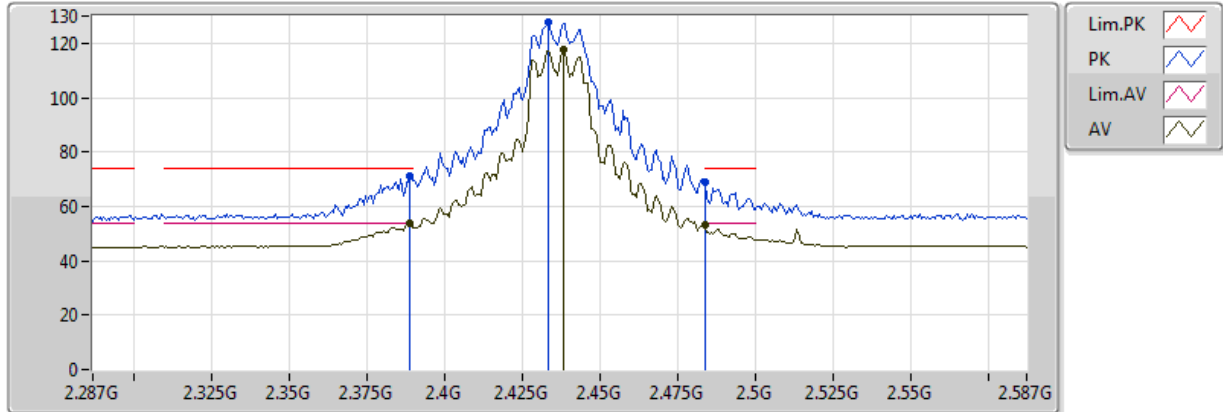


20170920
EUT_Y_3TX
Setting 102
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3872G	47.31	54.00	-6.69	32.28	3	Vertical	20	2.97					
AV	2.4364G	111.03	Inf	-Inf	32.40	3	Vertical	20	2.97					
AV	2.4856G	47.09	54.00	-6.91	32.53	3	Vertical	20	2.97					
PK	2.3872G	61.60	74.00	-12.40	32.28	3	Vertical	20	2.97					
PK	2.4358G	120.81	Inf	-Inf	32.40	3	Vertical	20	2.97					
PK	2.4862G	62.35	74.00	-11.65	32.53	3	Vertical	20	2.97					

VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

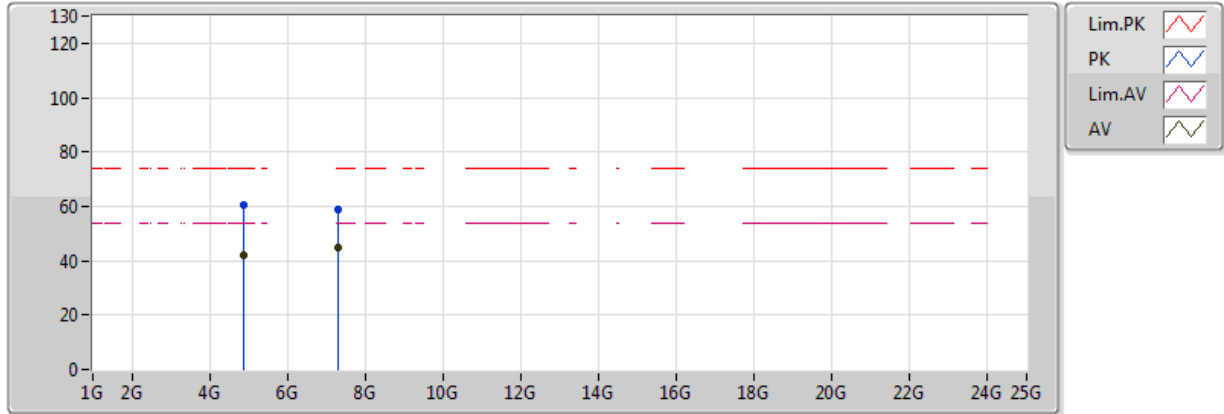


20170920
EUT Y_3TX
Setting 102
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.389G	53.75	54.00	-0.25	32.28	3	Horizontal	322	1.79					
AV	2.4382G	117.59	Inf	-Inf	32.41	3	Horizontal	322	1.79					
AV	2.483502G	53.11	54.00	-0.89	32.53	3	Horizontal	322	1.79					
PK	2.389G	71.18	74.00	-2.82	32.28	3	Horizontal	322	1.79					
PK	2.4334G	127.70	Inf	-Inf	32.40	3	Horizontal	322	1.79					
PK	2.4838G	68.81	74.00	-5.19	32.53	3	Horizontal	322	1.79					

VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

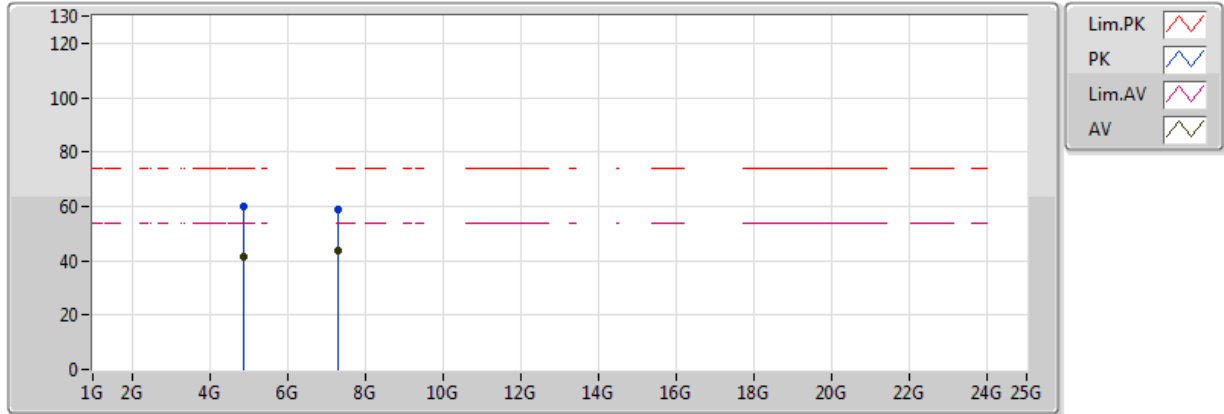


20170920
EUT_Y_3TX
Setting 102
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.873G	41.76	54.00	-12.24	5.22	3	Vertical	182	1.60					
AV	7.30844G	45.06	54.00	-8.94	9.09	3	Vertical	160	2.04					
PK	4.87268G	60.48	74.00	-13.52	5.22	3	Vertical	182	1.60					
PK	7.31328G	59.08	74.00	-14.92	9.08	3	Vertical	160	2.04					

VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

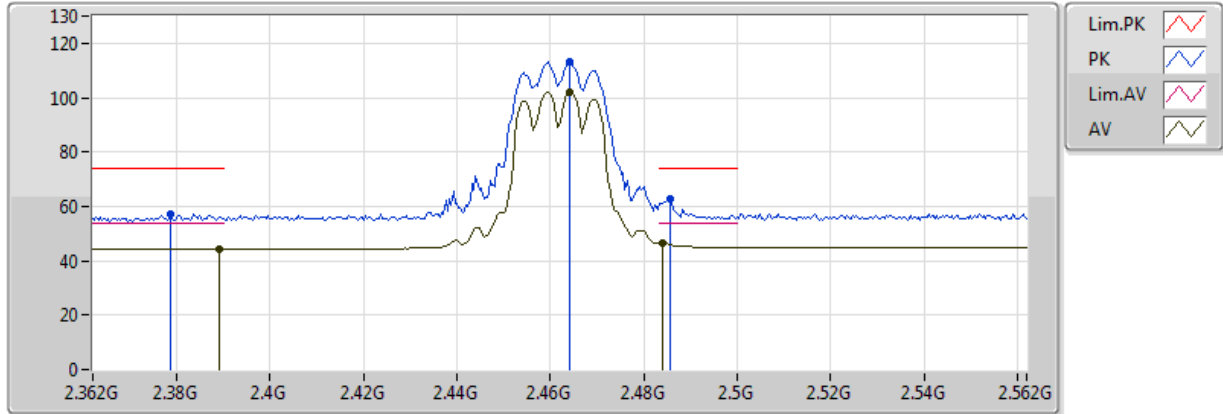


20170920
EUT_Y_3TX
Setting 102
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.87128G	41.40	54.00	-12.60	5.21	3	Horizontal	193	1.44					
AV	7.3082G	43.75	54.00	-10.25	9.09	3	Horizontal	206	1.01					
PK	4.87372G	59.80	74.00	-14.20	5.22	3	Horizontal	193	1.44					
PK	7.3085G	58.77	74.00	-15.23	9.09	3	Horizontal	206	1.01					

VHT20_Nss1,(MCS0)_3TX

2462MHz_TX

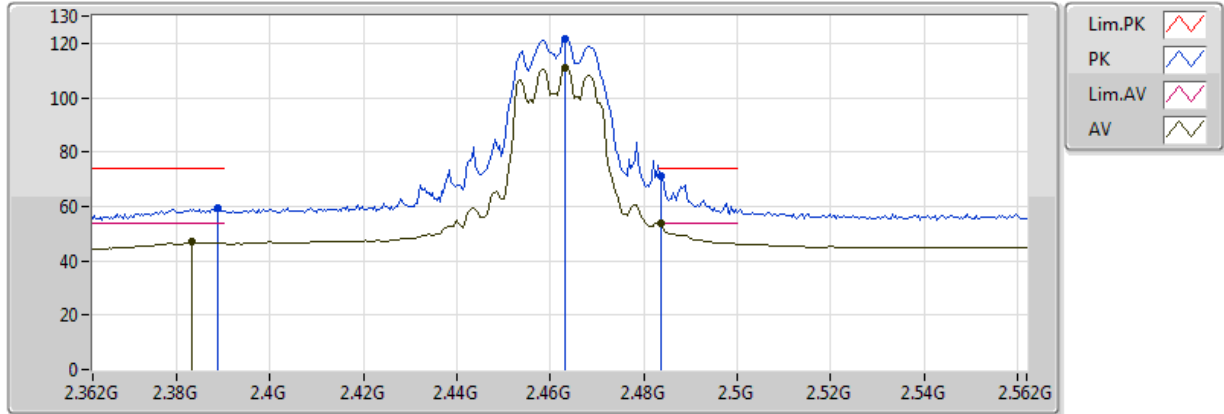


20170920
EUT Y_3TX
Setting 75
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3892G	44.39	54.00	-9.61	32.28	3	Vertical	199	2.69					
AV	2.464G	102.26	Inf	-Inf	32.48	3	Vertical	199	2.69					
AV	2.484G	46.53	54.00	-7.47	32.53	3	Vertical	199	2.69					
PK	2.3788G	57.27	74.00	-16.73	32.26	3	Vertical	199	2.69					
PK	2.464G	113.10	Inf	-Inf	32.48	3	Vertical	199	2.69					
PK	2.4856G	63.02	74.00	-10.98	32.53	3	Vertical	199	2.69					

VHT20_Nss1,(MCS0)_3TX

2462MHz_TX

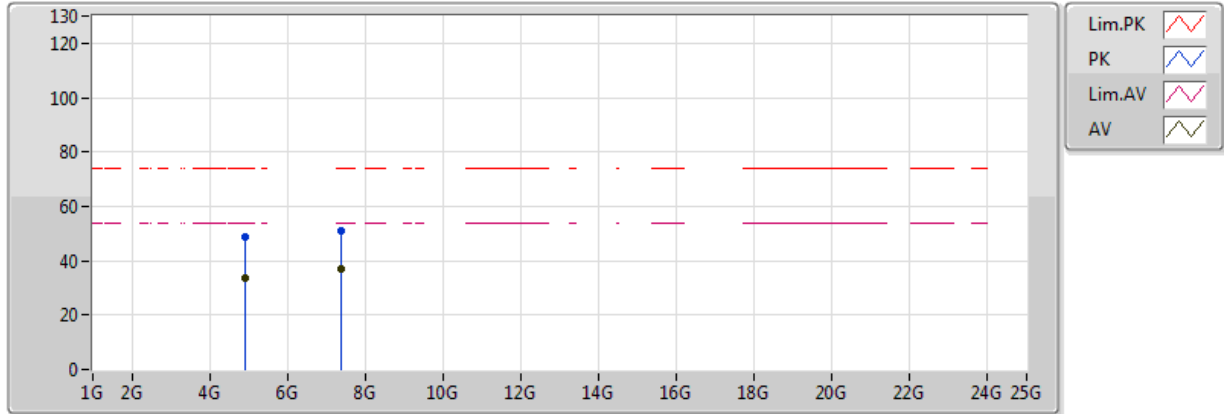


20170920
EUT Y_3TX
Setting 75
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3832G	47.01	54.00	-6.99	32.27	3	Horizontal	317	2.02					
AV	2.4632G	111.10	Inf	-Inf	32.47	3	Horizontal	317	2.02					
AV	2.4836G	53.59	54.00	-0.41	32.53	3	Horizontal	317	2.02					
PK	2.3888G	59.18	74.00	-14.82	32.28	3	Horizontal	317	2.02					
PK	2.4632G	121.75	Inf	-Inf	32.47	3	Horizontal	317	2.02					
PK	2.4836G	71.38	74.00	-2.62	32.53	3	Horizontal	317	2.02					

VHT20_Nss1,(MCS0)_3TX

2462MHz_TX

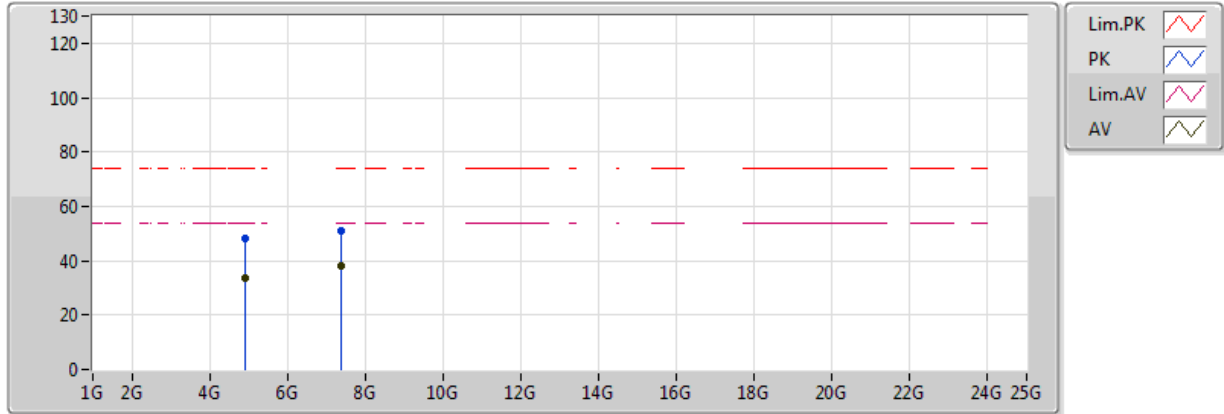


20170920
EUT_Y_3TX
Setting 75
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.92406G	33.78	54.00	-20.22	5.45	3	Vertical	9	1.99					
AV	7.3859G	36.89	54.00	-17.11	9.06	3	Vertical	147	1.75					
PK	4.92294G	48.61	74.00	-25.39	5.44	3	Vertical	9	1.99					
PK	7.38616G	50.92	74.00	-23.08	9.06	3	Vertical	147	1.75					

VHT20_Nss1,(MCS0)_3TX

2462MHz_TX

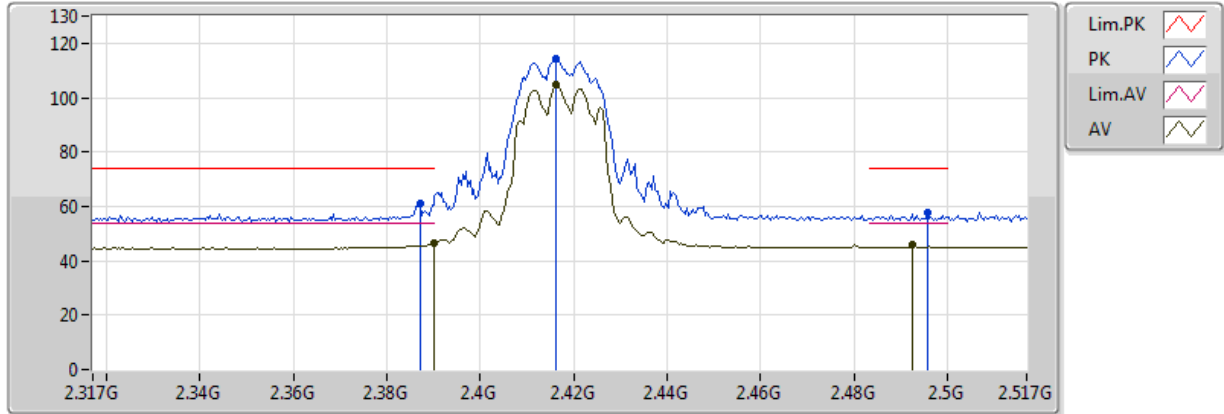


20170920
EUT_Y_3TX
Setting 75
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.92348G	33.74	54.00	-20.26	5.45	3	Horizontal	346	1.28					
AV	7.38588G	38.38	54.00	-15.62	9.06	3	Horizontal	151	1.28					
PK	4.92176G	48.05	74.00	-25.95	5.44	3	Horizontal	346	1.28					
PK	7.38604G	51.09	74.00	-22.91	9.06	3	Horizontal	151	1.28					

VHT20_Nss1,(MCS0)_3TX

2417MHz_TX

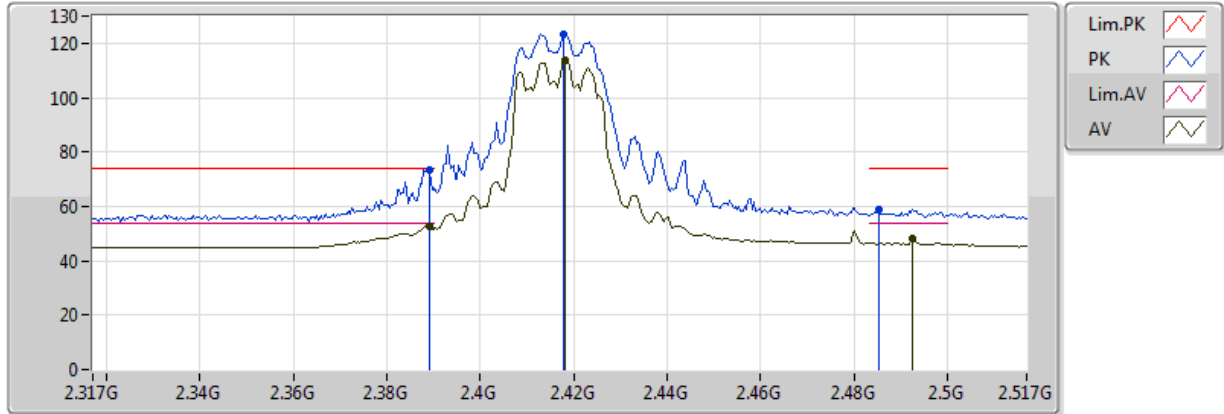


20170920
EUT Y_3TX
Setting 80
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.389998G	46.28	54.00	-7.72	32.28	3	Vertical	348	2.79					
AV	2.4162G	104.51	Inf	-Inf	32.35	3	Vertical	348	2.79					
AV	2.4926G	45.70	54.00	-8.30	32.55	3	Vertical	348	2.79					
PK	2.387G	61.21	74.00	-12.79	32.28	3	Vertical	348	2.79					
PK	2.4162G	114.53	Inf	-Inf	32.35	3	Vertical	348	2.79					
PK	2.4958G	57.56	74.00	-16.44	32.56	3	Vertical	348	2.79					

VHT20_Nss1,(MCS0)_3TX

2417MHz_TX

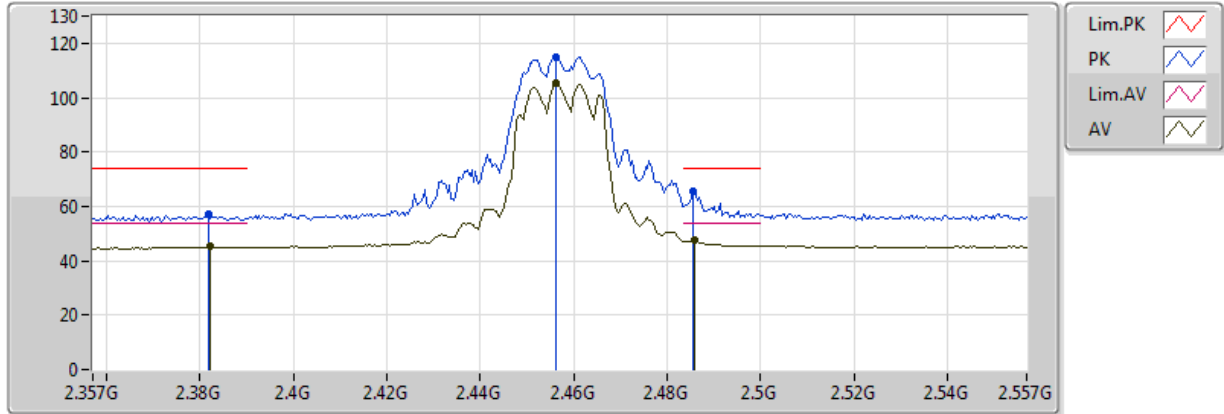


20170920
EUT Y_3TX
Setting 80
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.389G	52.76	54.00	-1.24	32.28	3	Horizontal	318	1.84					
AV	2.4182G	113.88	Inf	-Inf	32.36	3	Horizontal	318	1.84					
AV	2.4926G	48.12	54.00	-5.88	32.55	3	Horizontal	318	1.84					
PK	2.389G	73.48	74.00	-0.52	32.28	3	Horizontal	318	1.84					
PK	2.4178G	123.37	Inf	-Inf	32.36	3	Horizontal	318	1.84					
PK	2.4854G	58.90	74.00	-15.10	32.53	3	Horizontal	318	1.84					

VHT20_Nss1,(MCS0)_3TX

2457MHz_TX

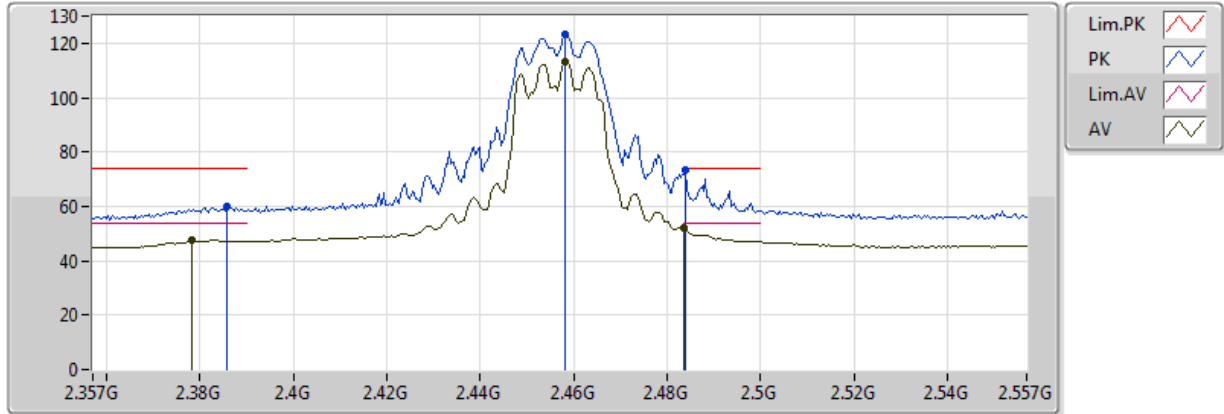


20170920
EUT Y_3TX
Setting 81
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3822G	45.11	54.00	-8.89	32.27	3	Vertical	356	2.99					
AV	2.4562G	105.32	Inf	-Inf	32.46	3	Vertical	356	2.99					
AV	2.4858G	47.48	54.00	-6.52	32.53	3	Vertical	356	2.99					
PK	2.3818G	57.03	74.00	-16.97	32.26	3	Vertical	356	2.99					
PK	2.4562G	115.09	Inf	-Inf	32.46	3	Vertical	356	2.99					
PK	2.4854G	65.77	74.00	-8.23	32.53	3	Vertical	356	2.99					

VHT20_Nss1,(MCS0)_3TX

2457MHz_TX

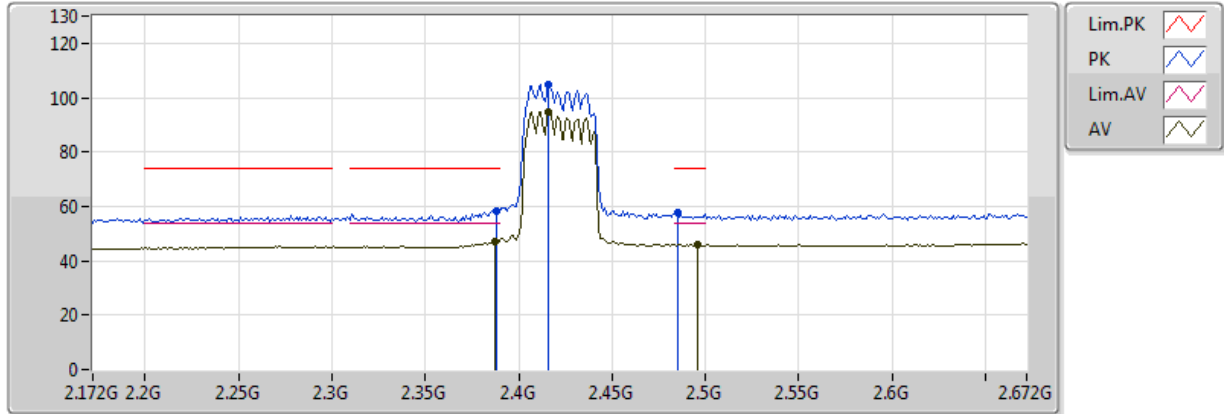


20170920
EUT Y_3TX
Setting 81
03-M-01
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3782G	47.56	54.00	-6.44	32.26	3	Horizontal	317	2.03					
AV	2.4582G	113.23	Inf	-Inf	32.46	3	Horizontal	317	2.03					
AV	2.483502G	52.28	54.00	-1.72	32.53	3	Horizontal	317	2.03					
PK	2.3858G	59.70	74.00	-14.30	32.27	3	Horizontal	317	2.03					
PK	2.4582G	123.01	Inf	-Inf	32.46	3	Horizontal	317	2.03					
PK	2.4838G	73.66	74.00	-0.34	32.53	3	Horizontal	317	2.03					

VHT40_Nss1,(MCS0)_3TX

2422MHz_TX

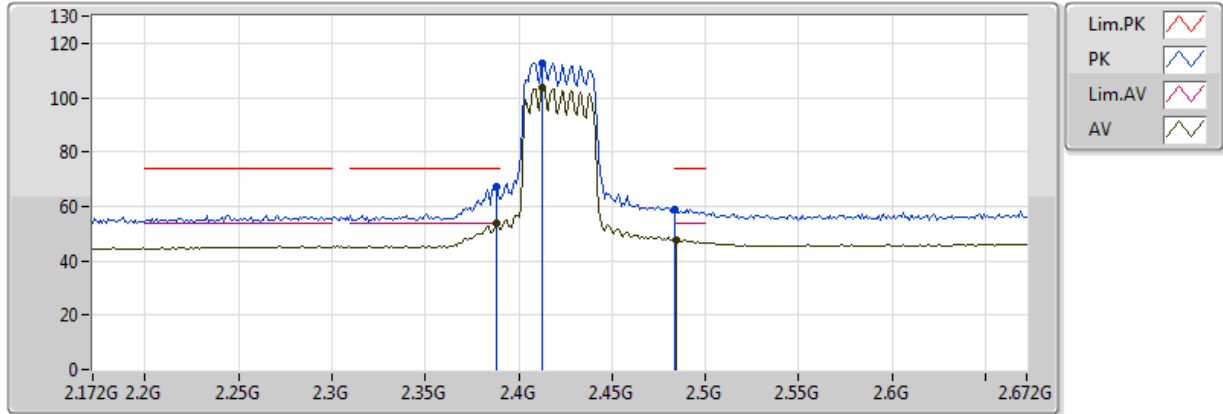


20170920
EUT_Y_3TX
Setting 54
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.387G	47.21	54.00	-6.79	32.28	3	Vertical	351	2.88					
AV	2.416G	94.97	Inf	-Inf	32.35	3	Vertical	351	2.88					
AV	2.496G	46.00	54.00	-8.00	32.56	3	Vertical	351	2.88					
PK	2.388G	58.52	74.00	-15.48	32.28	3	Vertical	351	2.88					
PK	2.416G	104.63	Inf	-Inf	32.35	3	Vertical	351	2.88					
PK	2.485G	57.78	74.00	-16.22	32.53	3	Vertical	351	2.88					

VHT40_Nss1,(MCS0)_3TX

2422MHz_TX

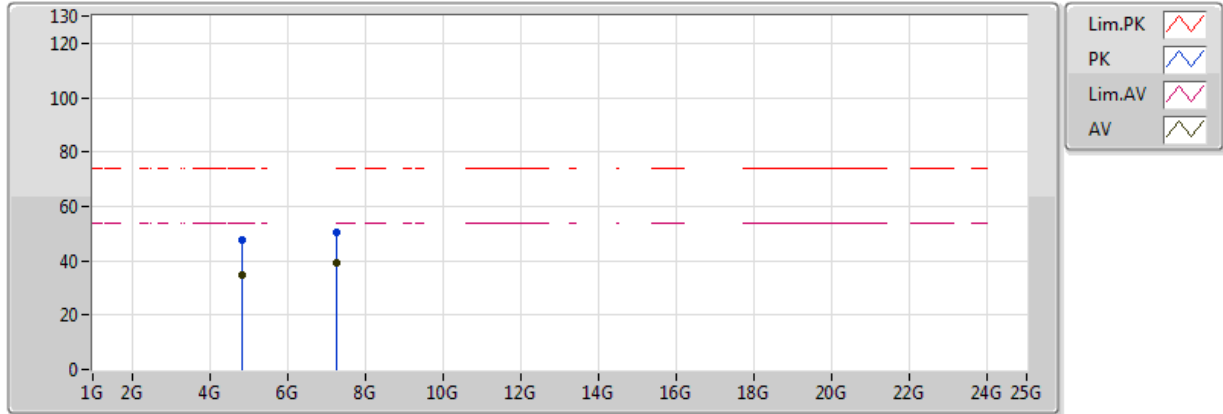


20170920
EUT Y_3TX
Setting 54
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.388G	53.98	54.00	-0.02	32.28	3	Horizontal	318	1.87					
AV	2.413G	103.47	Inf	-Inf	32.34	3	Horizontal	318	1.87					
AV	2.484G	47.56	54.00	-6.44	32.53	3	Horizontal	318	1.87					
PK	2.388G	67.07	74.00	-6.93	32.28	3	Horizontal	318	1.87					
PK	2.413G	112.81	Inf	-Inf	32.34	3	Horizontal	318	1.87					
PK	2.483502G	58.96	74.00	-15.04	32.53	3	Horizontal	318	1.87					

VHT40_Nss1,(MCS0)_3TX

2422MHz_TX

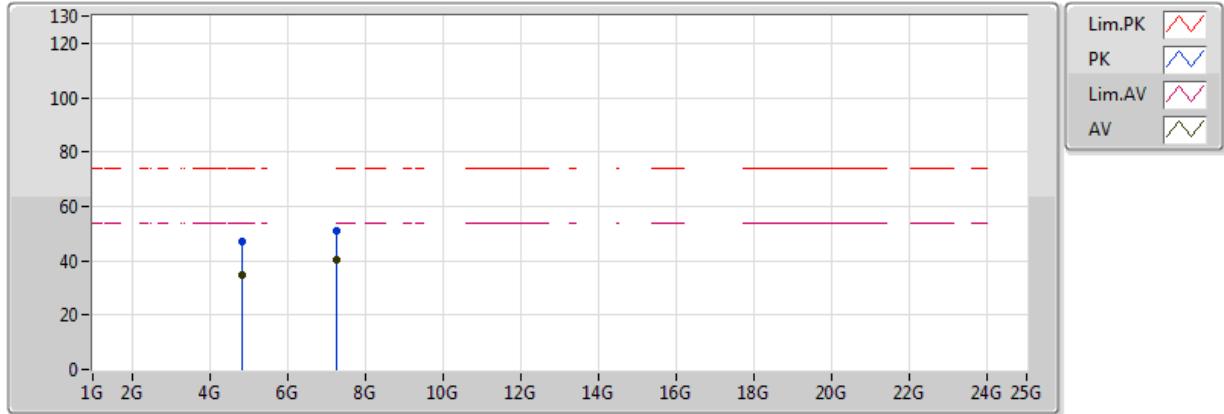


20170920
EUT Y_3TX
Setting 54
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.84514G	34.69	54.00	-19.31	5.10	3	Vertical	186	1.60					
AV	7.2659G	39.28	54.00	-14.72	9.10	3	Vertical	185	1.27					
PK	4.8451G	47.58	74.00	-26.42	5.10	3	Vertical	186	1.60					
PK	7.26348G	50.42	74.00	-23.58	9.10	3	Vertical	185	1.27					

VHT40_Nss1,(MCS0)_3TX

2422MHz_TX

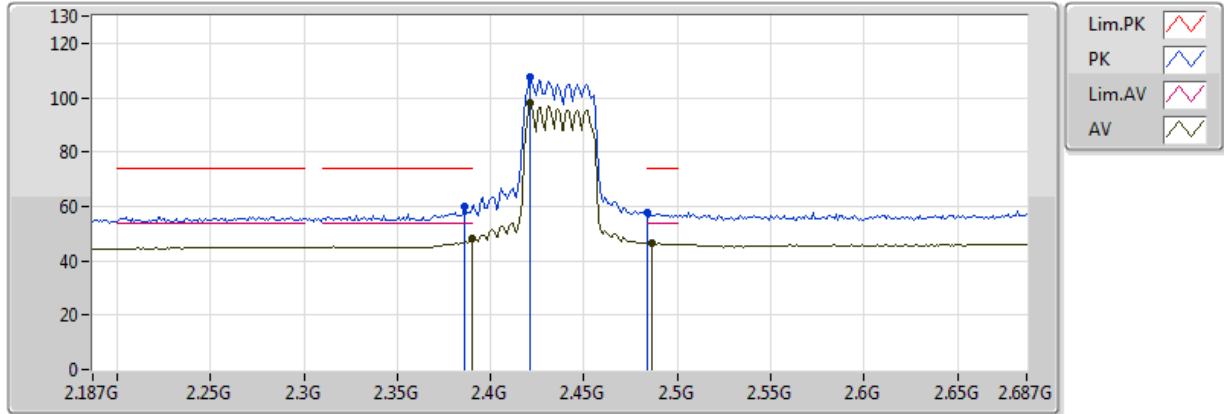


20170920
EUT_Y_3TX
Setting 54
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.84396G	35.01	54.00	-18.99	5.09	3	Horizontal	172	1.59					
AV	7.26592G	40.46	54.00	-13.54	9.10	3	Horizontal	147	1.15					
PK	4.84464G	47.16	74.00	-26.84	5.10	3	Horizontal	172	1.59					
PK	7.26592G	50.99	74.00	-23.01	9.10	3	Horizontal	147	1.15					

VHT40_Nss1,(MCS0)_3TX

2437MHz_TX

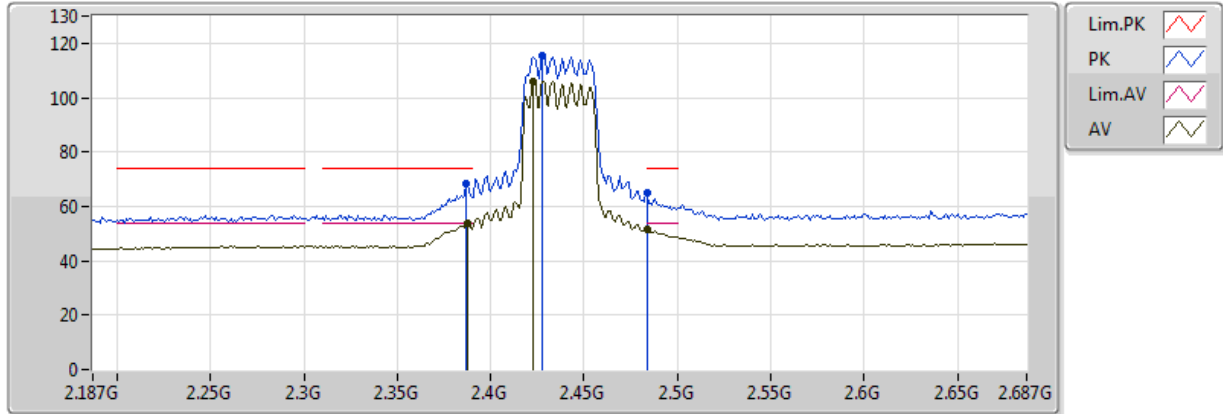


20170920
EUT Y_3TX
Setting 67
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.39G	48.18	54.00	-5.82	32.28	3	Vertical	350	2.81					
AV	2.421G	97.96	Inf	-Inf	32.36	3	Vertical	350	2.81					
AV	2.486G	46.41	54.00	-7.59	32.53	3	Vertical	350	2.81					
PK	2.386G	60.16	74.00	-13.84	32.27	3	Vertical	350	2.81					
PK	2.421G	107.65	Inf	-Inf	32.36	3	Vertical	350	2.81					
PK	2.484G	57.53	74.00	-16.47	32.53	3	Vertical	350	2.81					

VHT40_Nss1,(MCS0)_3TX

2437MHz_TX

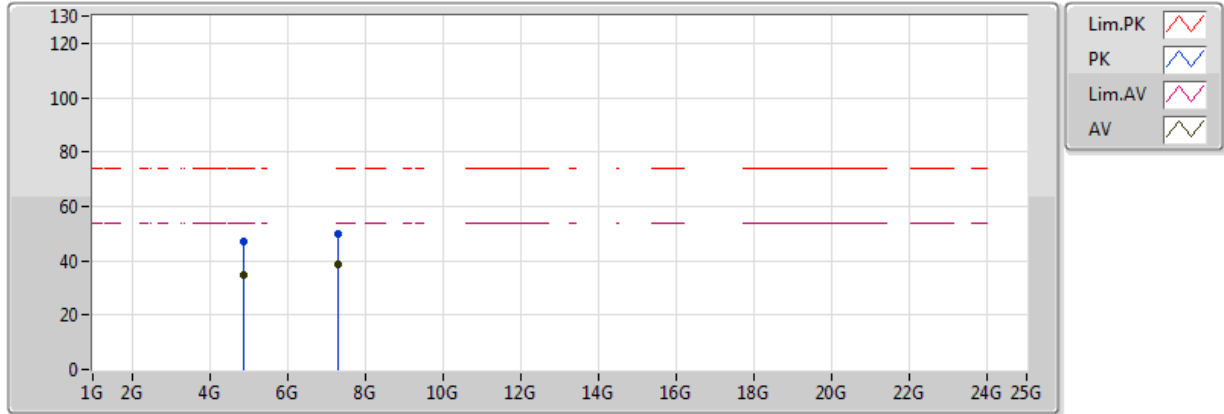


20170920
EUT Y_3TX
Setting 67
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.388G	53.58	54.00	-0.42	32.28	3	Horizontal	323	1.80					
AV	2.423G	106.11	Inf	-Inf	32.37	3	Horizontal	323	1.80					
AV	2.483502G	51.34	54.00	-2.66	32.53	3	Horizontal	323	1.80					
PK	2.387G	68.64	74.00	-5.36	32.28	3	Horizontal	323	1.80					
PK	2.428G	115.70	Inf	-Inf	32.38	3	Horizontal	323	1.80					
PK	2.483502G	65.23	74.00	-8.77	32.53	3	Horizontal	323	1.80					

VHT40_Nss1,(MCS0)_3TX

2437MHz_TX

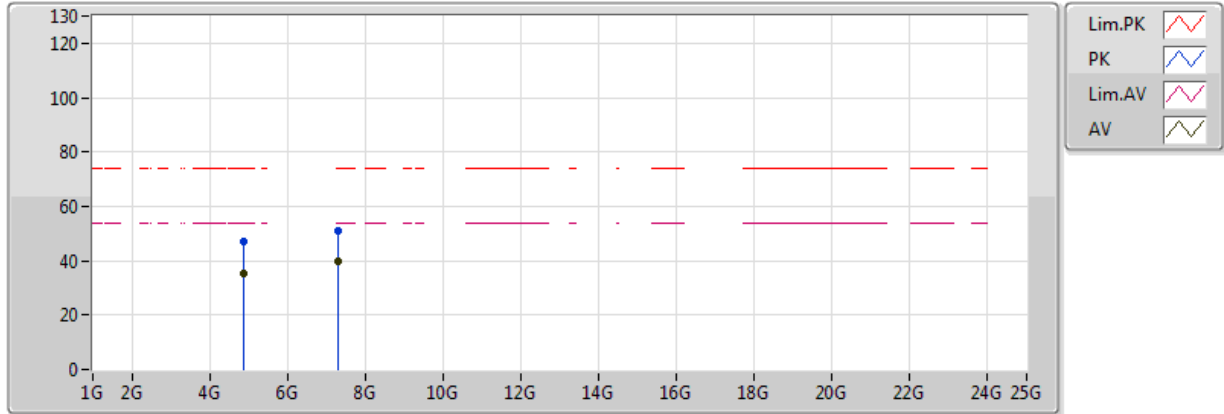


20170920
EUT_Y_3TX
Setting 67
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.87636G	34.89	54.00	-19.11	5.24	3	Vertical	136	2.00					
AV	7.31106G	38.61	54.00	-15.39	9.09	3	Vertical	186	1.17					
PK	4.87256G	47.28	74.00	-26.72	5.22	3	Vertical	136	2.00					
PK	7.3122G	49.85	74.00	-24.15	9.09	3	Vertical	186	1.17					

VHT40_Nss1,(MCS0)_3TX

2437MHz_TX

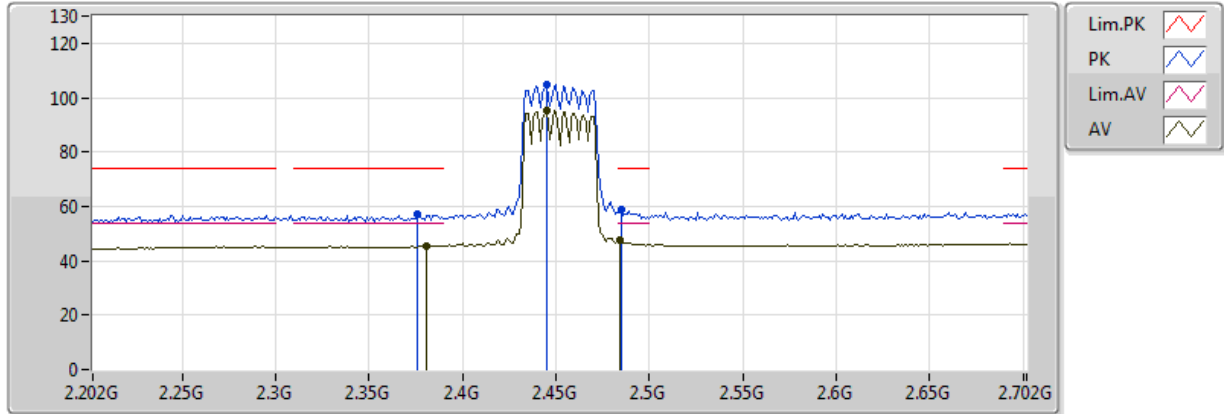


20170920
EUT_Y_3TX
Setting 67
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.86902G	35.06	54.00	-18.94	5.20	3	Horizontal	194	1.51					
AV	7.31102G	39.96	54.00	-14.04	9.09	3	Horizontal	146	1.16					
PK	4.8694G	47.33	74.00	-26.67	5.21	3	Horizontal	194	1.51					
PK	7.31082G	51.23	74.00	-22.77	9.09	3	Horizontal	146	1.16					

VHT40_Nss1,(MCS0)_3TX

2452MHz_TX

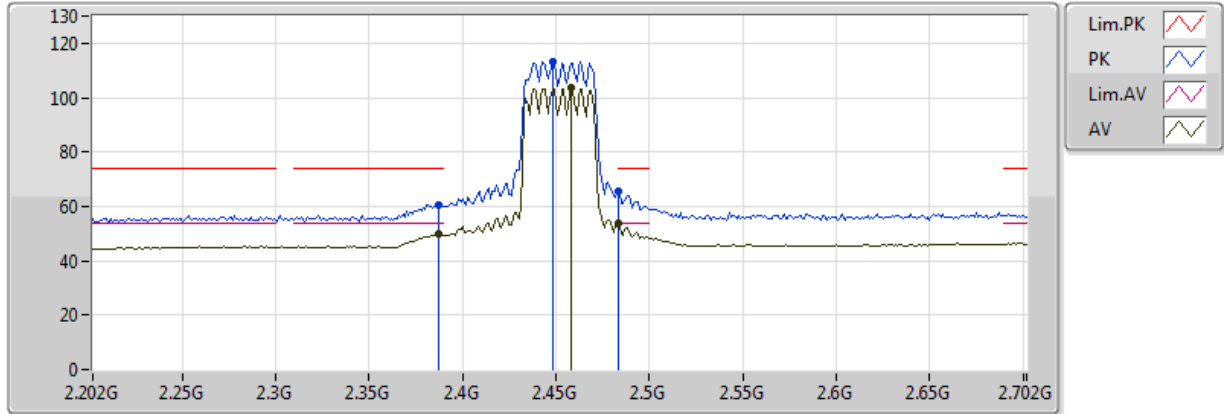


20170920
EUT Y_3TX
Setting 57
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.381G	45.53	54.00	-8.47	32.26	3	Vertical	194	2.75					
AV	2.445G	95.01	Inf	-Inf	32.43	3	Vertical	194	2.75					
AV	2.484G	47.66	54.00	-6.34	32.53	3	Vertical	194	2.75					
PK	2.376G	57.08	74.00	-16.92	32.25	3	Vertical	194	2.75					
PK	2.445G	104.85	Inf	-Inf	32.43	3	Vertical	194	2.75					
PK	2.485G	58.76	74.00	-15.24	32.53	3	Vertical	194	2.75					

VHT40_Nss1,(MCS0)_3TX

2452MHz_TX

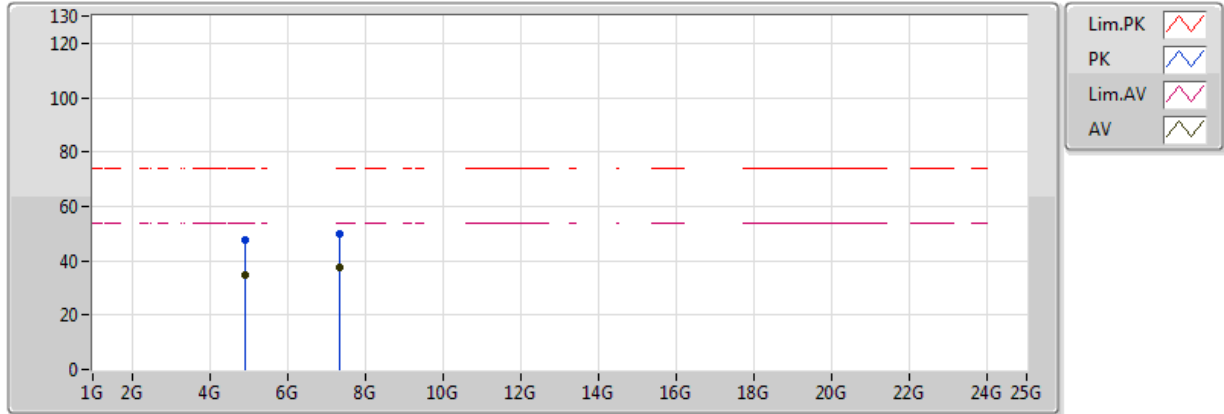


20170920
EUT Y_3TX
Setting 57
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.387G	49.67	54.00	-4.33	32.28	3	Horizontal	319	2.01					
AV	2.458G	103.41	Inf	-Inf	32.46	3	Horizontal	319	2.01					
AV	2.483502G	53.66	54.00	-0.34	32.53	3	Horizontal	319	2.01					
PK	2.387G	60.54	74.00	-13.46	32.28	3	Horizontal	319	2.01					
PK	2.448G	113.12	Inf	-Inf	32.43	3	Horizontal	319	2.01					
PK	2.483502G	65.84	74.00	-8.16	32.53	3	Horizontal	319	2.01					

VHT40_Nss1,(MCS0)_3TX

2452MHz_TX

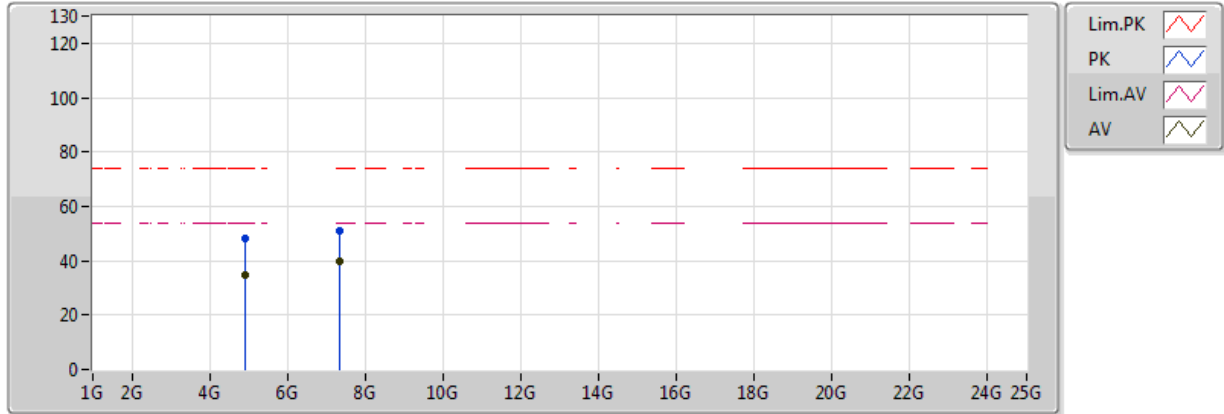


20170920
EUT_Y_3TX
Setting 57
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.90976G	34.81	54.00	-19.19	5.38	3	Vertical	191	1.50					
AV	7.35588G	37.45	54.00	-16.55	9.07	3	Vertical	140	1.60					
PK	4.90116G	47.42	74.00	-26.58	5.35	3	Vertical	191	1.50					
PK	7.35606G	49.67	74.00	-24.33	9.07	3	Vertical	140	1.60					

VHT40_Nss1,(MCS0)_3TX

2452MHz_TX

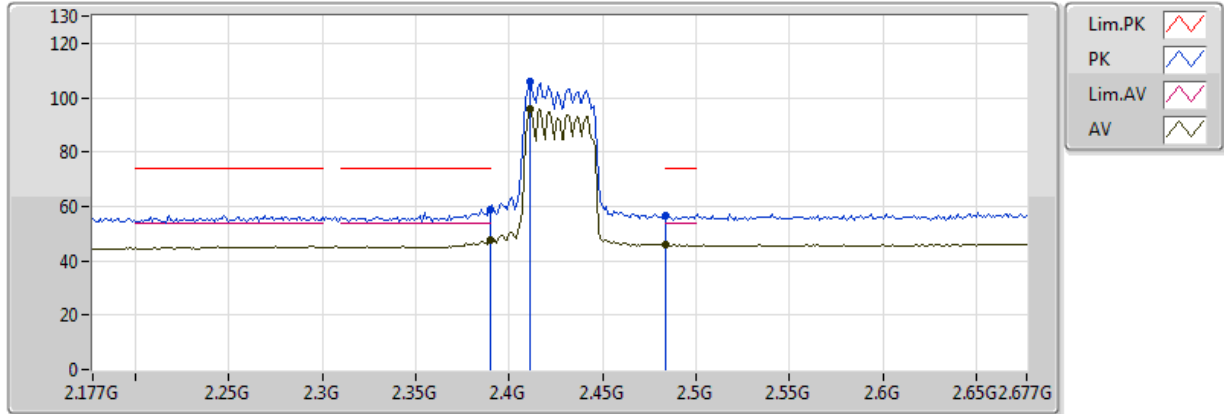


20170920
EUT_Y_3TX
Setting 57
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.90394G	35.02	54.00	-18.98	5.36	3	Horizontal	155	1.50					
AV	7.356G	39.96	54.00	-14.04	9.07	3	Horizontal	147	1.09					
PK	4.90858G	48.05	74.00	-25.95	5.38	3	Horizontal	155	1.50					
PK	7.35592G	50.98	74.00	-23.02	9.07	3	Horizontal	147	1.09					

VHT40_Nss1,(MCS0)_3TX

2427MHz_TX

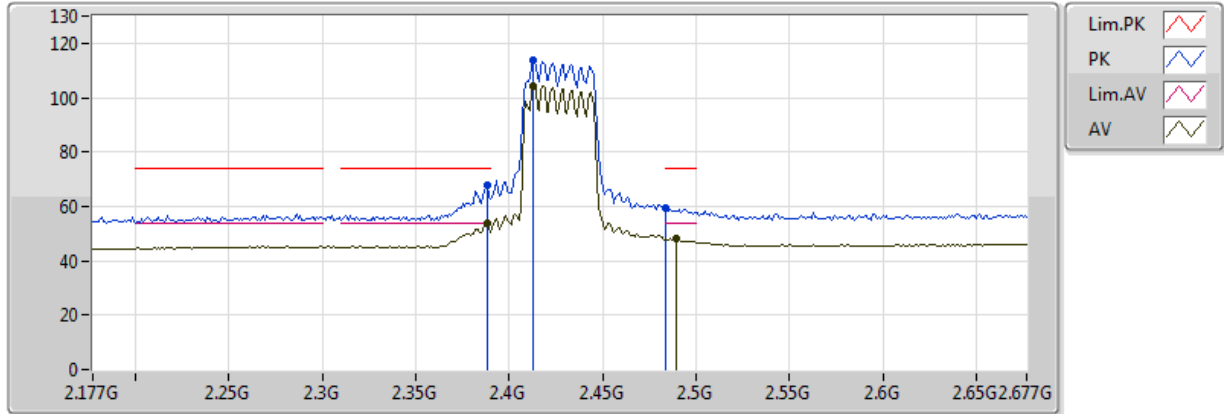


20170920
EUT Y_3TX
Setting 57
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.39G	47.82	54.00	-6.18	32.28	3	Vertical	350	2.85					
AV	2.411G	95.97	Inf	-Inf	32.34	3	Vertical	350	2.85					
AV	2.483502G	45.90	54.00	-8.10	32.53	3	Vertical	350	2.85					
PK	2.39G	59.08	74.00	-14.92	32.28	3	Vertical	350	2.85					
PK	2.411G	105.80	Inf	-Inf	32.34	3	Vertical	350	2.85					
PK	2.483502G	56.86	74.00	-17.14	32.53	3	Vertical	350	2.85					

VHT40_Nss1,(MCS0)_3TX

2427MHz_TX

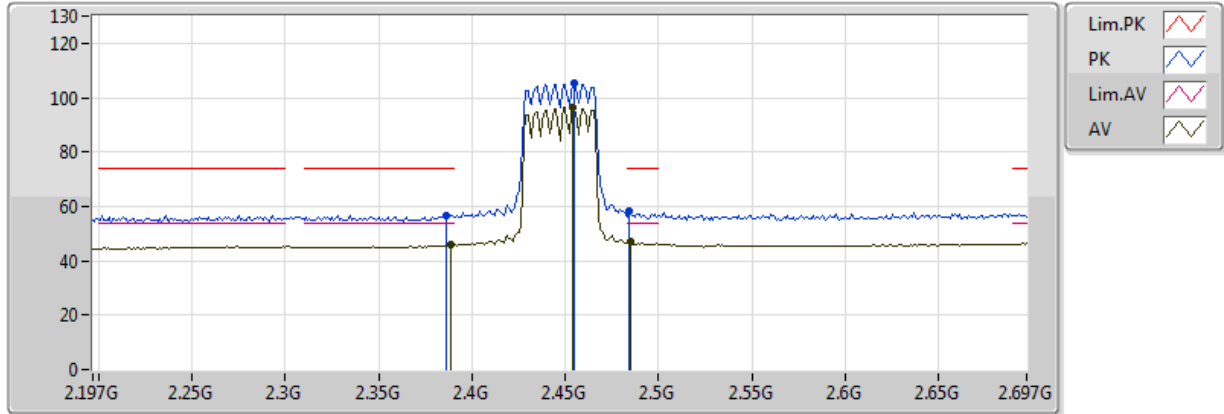


20170920
EUT Y_3TX
Setting 57
03-P-2
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.388G	53.79	54.00	-0.21	32.28	3	Horizontal	321	1.85					
AV	2.413G	104.30	Inf	-Inf	32.34	3	Horizontal	321	1.85					
AV	2.489G	48.09	54.00	-5.91	32.54	3	Horizontal	321	1.85					
PK	2.388G	67.78	74.00	-6.22	32.28	3	Horizontal	321	1.85					
PK	2.413G	113.90	Inf	-Inf	32.34	3	Horizontal	321	1.85					
PK	2.484G	59.13	74.00	-14.87	32.53	3	Horizontal	321	1.85					

VHT40_Nss1,(MCS0)_3TX

2447MHz_TX

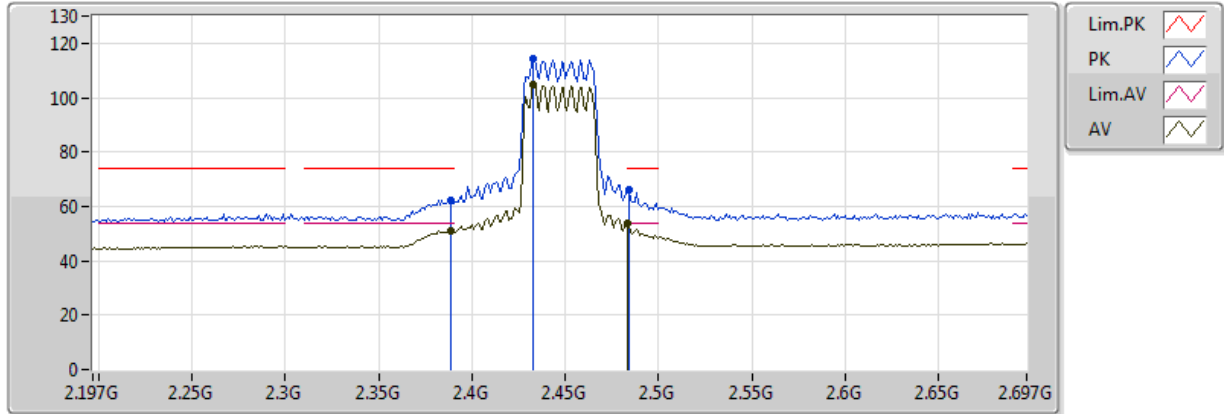


20170920
EUT Y_3TX
Setting 62
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.389G	45.69	54.00	-8.31	32.28	3	Vertical	196	2.78					
AV	2.454G	96.26	Inf	-Inf	32.45	3	Vertical	196	2.78					
AV	2.485G	47.11	54.00	-6.89	32.53	3	Vertical	196	2.78					
PK	2.386G	56.71	74.00	-17.29	32.27	3	Vertical	196	2.78					
PK	2.455G	105.50	Inf	-Inf	32.45	3	Vertical	196	2.78					
PK	2.484G	58.43	74.00	-15.57	32.53	3	Vertical	196	2.78					

VHT40_Nss1,(MCS0)_3TX

2447MHz_TX



20170920
EUT Y_3TX
Setting 62
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.389G	51.25	54.00	-2.75	32.28	3	Horizontal	320	1.84					
AV	2.433G	104.95	Inf	-Inf	32.40	3	Horizontal	320	1.84					
AV	2.483502G	53.65	54.00	-0.35	32.53	3	Horizontal	320	1.84					
PK	2.389G	62.35	74.00	-11.65	32.28	3	Horizontal	320	1.84					
PK	2.433G	114.13	Inf	-Inf	32.40	3	Horizontal	320	1.84					
PK	2.484G	66.38	74.00	-7.62	32.53	3	Horizontal	320	1.84					

